

Vandana Shiva • Thomas Laird • George Leonard • Wendy Brawer • Jerry Brown

W H O L E R E V I E W E A R T H

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Winter 1995

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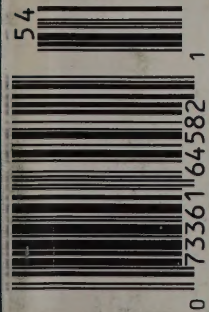
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Tools
Ideas
Books

Cutting From the Heart: The Northwestern Forest



Internet Watershed Resources
A Woman's World in Assam
Ecological Design





Duster Slippers For Cats

For feline assistance with tedious housework

Now the most boring job around the house becomes hours of fun. Not for you, but for your cat! With these dust-dislodging foot socks, cats can play their part in easing the pressure of domestic chores. Lazy cats are of course much less productive than excitable ones, but this problem may be overcome if you introduce a dog into the house.



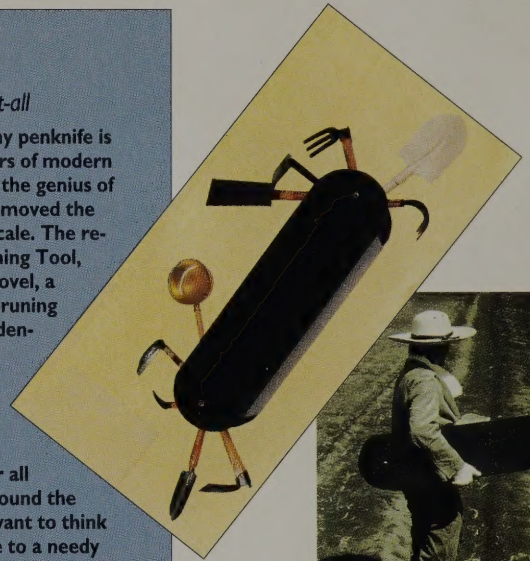
CHINDOGU



Ten-in-one Gardening Tool

The amateur gardener's do-it-all

The multi-faceted Swiss Army penknife is one of the great life-enhancers of modern times. By way of a tribute to the genius of this invention, Chindogu has moved the concept forward, and up in scale. The result is the Ten-in-one Gardening Tool, incorporating two sizes of shovel, a hoe, a blade, a saw, a set of pruning shears and several other gardening implements, all in one (moderately) compact unit. No more endless trips to and from the shed, and when the day's work is done, you won't have to remember all the tools you've scattered around the garden. However, you may want to think twice about lending your hoe to a needy neighbour, as everything else will have to go with it.

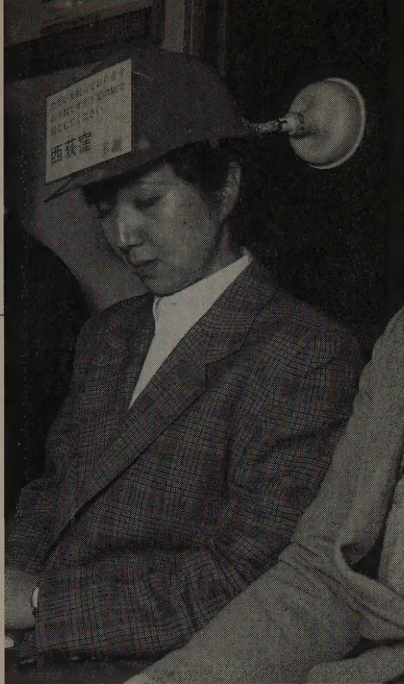


Finger Protector

For dangerous and dirty manual tasks

This silicone substitute hand is designed to reduce the danger of cutting your own fingers when preparing food. Careless choppers can become carefree, slicing away at high speed, safe in the knowledge that damage done will be to a hand that doesn't mind. It won't recoil from dirty jobs either, so if you happen to be phobic about raw onions, fish scales, or the slippery vegetable debris that collects in the plug of the kitchen sink, then allow fearless silicone fingers to lend a hand.





Commuter's Helmet

For secure subway snoozing

Another Chindogu to aid the comfort and repose of weary commuters, and arguably the best. Like the Subway Sleeper's Screen, the Commuter's Helmet sports a message to fellow travellers, reading, "I'm having a short nap. Could you please wake me up when I reach the stop printed below? Many thanks." But since it depends entirely on the cooperation of fellow passengers for success, this Chindogu has also been designed to maximise their finer communal instincts and sense of goodwill. The suction pad on the back of the helmet keeps the head firmly in place, thus preventing the sleeper's head from lolling intrusively on the shoulders or laps of his or her neighbours. This courtesy will no doubt be appreciated, and the reciprocal favour of a timely awakening is more likely to be achieved.

The Ten Tenets of Chindogu

1. A Chindogu cannot be for real use.

It is fundamental to the spirit of Chindogu that inventions claiming Chindogu status must be, from a practical point of view, (almost) completely useless. If you invent something which turns out to be so handy that you use it all the time, then you have failed to make a Chindogu. Try the Patent Office.

2. A Chindogu must exist.

You're not allowed to use a Chindogu, but it must be made. You have to be able to hold it in your hand and think "I can actually imagine someone using this. Almost." In order to be useless, it must first be.

3. Inherent in every Chindogu is the spirit of anarchy.

Chindogu are man-made objects that have broken free from the chains of usefulness. They represent freedom of thought and action: the freedom to challenge the suffocating historical dominance of conservative utility; the freedom to be (almost) useless.

4. Chindogu are tools for everyday life.

Chindogu are a form of nonverbal communication understandable to everyone, everywhere. Specialised or technical inventions, like a three-handled sprocket loosener for drainpipes centred between two under-the-sink cabinet doors (the uselessness of which will only be appreciated by plumbers), do not count.

5. Chindogu are not for sale.

Chindogu are not tradable commodities. If you accept money for one, you surrender your purity. They must not even be sold as a joke.

6. Humour must not be the sole reason for creating a Chindogu.

The creation of a Chindogu is fundamentally a problem-solving activity. Humour is simply the by-product of finding an elaborate or unconventional solution to a problem that may not have been that pressing to begin with.

7. Chindogu is not propaganda.

Chindogu are innocent. They are made to be used, even though they cannot be used. They should not be created as a perverse or ironic comment on the sorry state of mankind.

8. Chindogu are never taboo.

The International Chindogu Society has established certain standards of social decency. Cheap sexual innuendo, humour of a vulgar nature, and sick or cruel jokes that debase the sanctity of living things are not allowed.

9. Chindogu cannot be patented.

Chindogu are offerings to the rest of the world — they are not therefore ideas to be copyrighted, patented, collected and owned. As they say in Spain, *mi Chindogu es tu Chindogu*.

10. Chindogu are without prejudice.

Chindogu must never favour one race or religion over another. Young and old, male and female, rich and poor — all should have a free and equal chance to enjoy each and every Chindogu.

101 Unuseless Japanese Inventions: The Art of Chindogu

There are two ways of looking at Chindogu:

- 1. It is a deliciously subversive commentary on a consumer society that worships at the altar of advertising; or*
- 2. It is the result of the author having the psychological equivalent of an allergic reaction to editing a home shopping magazine.*

Me, I haven't quite made up my mind. The unuseless inventions depicted herein are described in the time-honored pitchman tradition of a straight face and a tone of conviction. It's hilarious yet vaguely disturbing — not entirely unlike the concept of sushi.

Is there a lesson to be learned here? Is it just plain fun? Or should we not worry about it and surrender blithely to the absurdity? —Andrea Chase

101 Unuseless Japanese Inventions

Kenji Kawakami. Translated by Dan Papia.

1995; 160 pp. ISBN 0-393-31369-7

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Personal Rain Saver

Every drop that falls is yours to keep

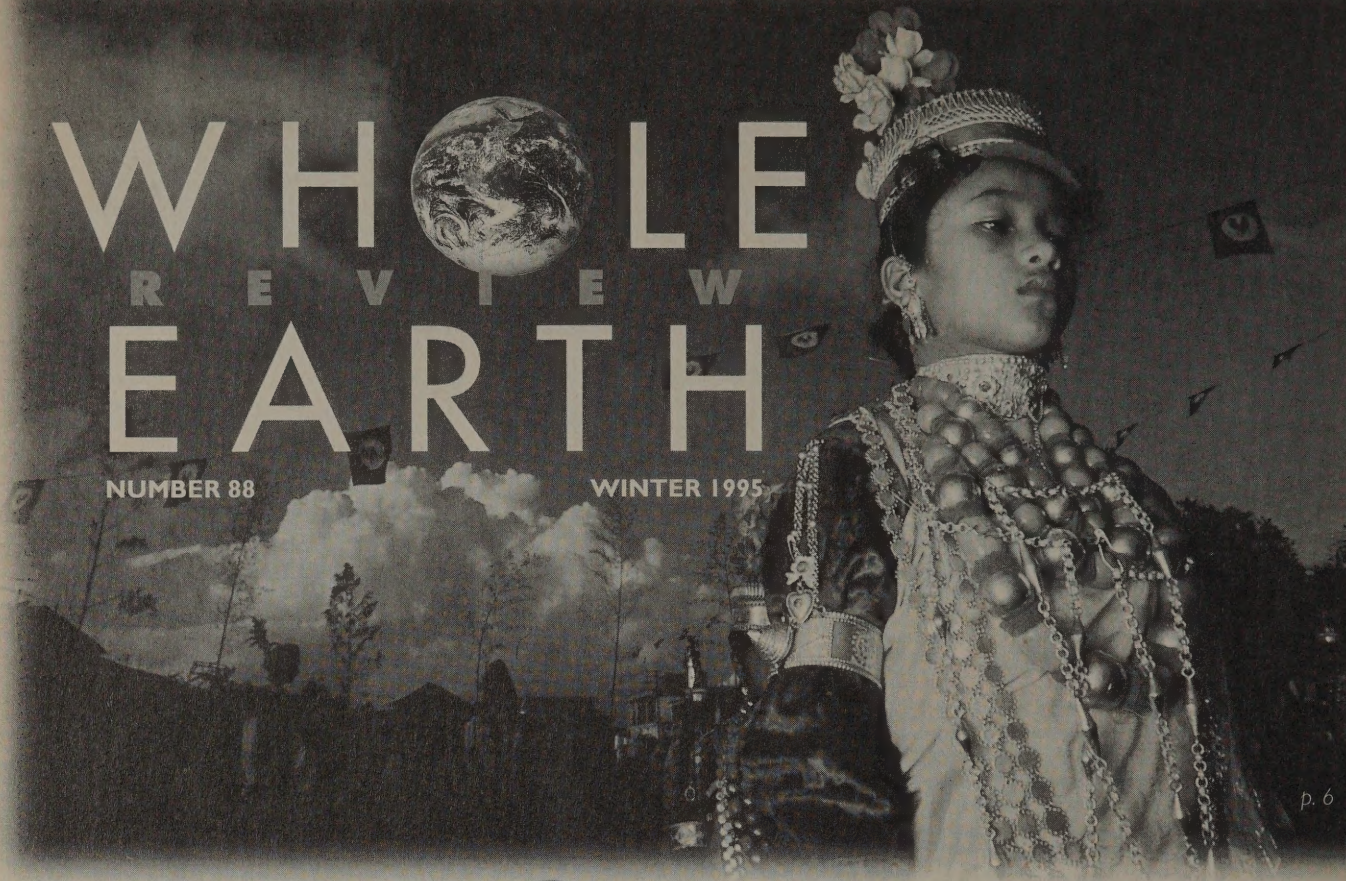
No one has any illusions about the value of water as a natural resource. Yet all of us watch hundreds of gallons washing off our umbrellas and into the gutters every year. With the Personal Rain Saver you not only stay dry, you can collect your own share of natural precipitation in a shoulder-harnessed tank.

As an alternative to mass assembly, the Personal Rain Saver provides a pro-planet pastime for peaceful protesters to engage in on their own (weather permitting).

WHOLE EARTH

NUMBER 88

WINTER 1995



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Thomas Laird

COVER

William Jackson Maxwell creates profound and beautiful statements about endangered species. His images, their constituent materials, and the sites in which they reside call attention to civilization's impact on the environment. The constructions stir conversation among visitors, both during the creation process and long after his visions are completed. Maxwell's outdoor "galleries" become public forums for reflection.

The pictured *Forest Stories/Brazilian Stump* (one of a number of diseased elms at the University of Colorado that Maxwell used to represent the rain-forest) was painstakingly carved, then burned, then inscribed with a story from his childhood days of forest adventures. Maxwell left a pencil for viewers to add their own thoughts.

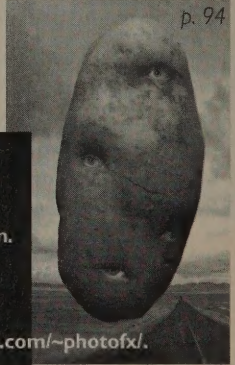
More of Maxwell's work can be seen in *Sculpting with the Environment* (reviewed on p. 121).



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Ron Brown, our eminent Spudographer, can be reached at photofx@xmission.com. His photographs are viewable on the World Wide Web: <http://www.xmission.com/~photofx/>.

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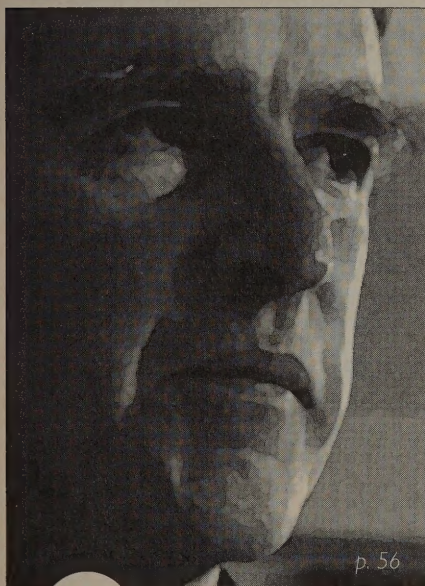
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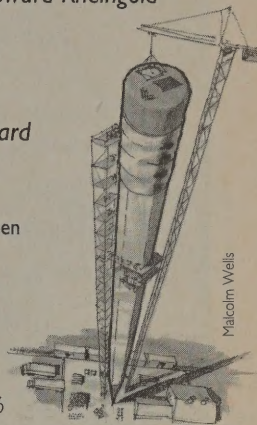
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BACKSCATTER



UTRAGED REFUTATIONS, ecstatic syntheses, icy corrections, generous compliments, modest proposals and rebellious bellowings from readers to editors, writers, and each other.

- *Letters may be edited for space, though we undertake the task with reluctance and a heavy heart.*

Write to 27 Gate Five Road, Sausalito, CA 94965,
or email: wer@well.com

Sperm Suicide?

In your review of *Planetary Overload* (WER 86:54) you refer to the worldwide decline of sperm count as a second-order disorder.

I can see that a sperm count problem could be a disappointment or tragedy to an individual, but on a global level it seems to me a very encouraging sign. If we are suffering (as I agree we are) from swarming humanity, then a reduction in fertility is going to tend to ameliorate the problem.

The fact that sperm counts are observed to be going down instead of up is not random. As your review suggests, this change would seem to be the result of a proliferating set of environmental disturbances. But I read it as the effect of a mechanism of homeostasis, analogous to the damping of a chemical reaction in the presence of its own end products. In this case, the reaction is the reproduction of the human species. What the mechanism would be, I couldn't say. But it is clear that species that overgrow their habitat invariably die back.

Thanks for your terrific magazine. It gives me hope.

Hamil Dunsky
Bellevue, Washington

Eros vs. Logic

I found Susan Griffin's "The Eros of Everyday Life" (#86:22) to be simplistic at best and lacking any form of perspective at worst. Ms. Griffin's reasoning echoes that of Jeremy Rifkin, who had nothing but melodious praise for the wonderful characteristics of life in the middle ages. Never mind that except for analytical thinking and the scientific method, we would still be living short, disease-filled brutal lives under the thumbs of the local tyrant and priest.

More than anyone, modern scientists are aware of the grand designs, synchronicities and myriad's of other patterns and things within nature. She obviously has not talked too extensively with biologists, astronomers or physicists (who are readily available in Berkeley, by the way). It seems like she has never read any of the popular works by people such as Carl Sagan, who has made a second career of attempting to explain the grandeur of the universe to the average person.

I think her real argument is with the rampant materialism of Western society, which is another term for the values of huckster



capitalism. As long as money is the king of values in this society, society and the environment will continue to erode. Until the value of everything else in the human realm is placed on a level playing field (pardon the patriarchal sports pun, it is the best still available), we will continue down the slippery slope into social and ecological chaos.

The only real natural logic is that of survival. Since I as a human being am at the top of the food chain, I will continue to squish cockroaches in my kitchen and kill vermin in the food supply. That is simply inherent in being at the top of the food chain.

Michael D. Setty
Vallejo, California

Grudgingly Green

The extent to which green plans depend on government coercion for their implementation, is the extent to which they will fail. People should feel the need to modify their behavior coming from within. If instead they change their ways because someone forces them to, it will be a grudging change, accomplished by a significant reduction of peoples' freedom at great expense, and will be reversed as soon as the opportunity presents itself at the next election.

Persuasion, not coercion, is the key.

Paul Bonnie
Portland, Oregon

Digital Evidence

About 10 years ago Jay Kinney, Stewart Brand, and Kevin Kelly wrote an article ["Digital Retouching," *WER* 47:42] on how easy it was to mess with photographs and other sorts of electronic recordings, and they posited that at some point all such evidence would be held inadmissible in courts of law.

Well, a 1,000 page book that I wrote on electronic evidence has just been published, and the fact is that their prediction is wrong. If anything, the "foundation" standards for evidence have become more relaxed over time, despite the ability to use computers to falsify audio and video evidence.

Frequently, when I mention my field to strangers who are cool, they tell me

that "I thought all electronic evidence was inadmissible," and I ask them why, and they point back to the *WER* article. In other words, that article (with the flying saucers) left a deep imprint, but a somewhat misleading one.

Jordan Gruber
jordan@well.com

My Dream Home

I had a *WER* dream last night.

For fifteen years, my husband and I have been building, stick by stick and stone by stone, our home in the forest of the sierra foothills. In my dream, my husband and I decided to visit a fellow who lives in Australia whom we had read articles by and about in *WER*. He seemed to share our ideas about how one should live and we knew that he was in the process of building a home based upon his beliefs. We had been struggling to resolve some design problem with our house and decided that we would consult him. Through mutual acquaintances we found out where he lived and flew to Australia.

The dream began as we were driving out of a city and entering the outskirts where the manicured yards gave way to the more casual landscaping of junked cars, vegetable gardens and dirt roads. Soon the road took us up a small hill and when we reached the top, the terrain dropped off so that we saw nothing but the sky above and an enormous deep blue lake below. We knew to turn right here and soon came upon a house under construction. Several people had just finished pouring a small concrete slab and were standing around relaxing after the morning's work. We located the owner of the house and introduced ourselves. As soon as he heard we were long-term readers of *WER* and *CQ* before it, he broke into a broad, generous smile and welcomed us as dear old friends.

We immediately fell into an animated and warm conversation about our houses, never needing to explain our basic beliefs and underlying principles. It was as if, because we were all part of the *WER* family, we had known each other forever.

Sharon Jones
Nevada City, California

Hazel Henderson, Criminal

Just finished enjoying your interview with Hazel Henderson in your Fall issue. She is an author I have long admired — since the time I have gained an interest in alternative energy studies. I am quite disappointed that she could justify the crime of downsizing.

Gary Parsons
parsons@acc.fau.edu

Soul Soup

Your soul-searching about what exactly you are all about goes back a quarter century or so (and is good). Your agonizing seems a bit more recent and is only now getting you properly back on track (at least to my mind). A brief synopsis:

1. Originally, you seemed to think you were about "Access to Tools".
2. Then there appeared a slightly different emphasis with "CoEvolution".
3. This lasted unto Issue #44, when we have "Tools and Ideas for the Computer Age"! (Emphasis mine).
4. With Issue # 48, you give us "Access to tools *and* Ideas". (Emphasis mine!)
5. And finally, with Issue #83 we settle in to "Tools, Ideas, Books".

What I think you are all about, and indeed have always been about, is "TOOLS FOR LIVING". Period.

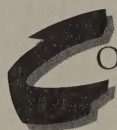
You see, to my mind, the idea of "co-evolution" is a tool (one among many). As is the computer. As are ideas themselves (as opposed to tools *and* ideas)! As are, finally, books.

Anything in fact that one can apply or relate to one's own life can be a tool, no? This includes vegetable peelers. And it includes poetry.

In this spirit, how about some "J. Baldwin in the kitchen"! What is the best peeler? The best carving knife? What is so great about wooden spoons? Something on "The Cutting Board Controversy" as it relates to wood and bacteria (the results are surprising).

Tom Green
Saint Petersburg, Florida

A Woman's World



CONCERNED CITIZENS GATHERED RECENTLY IN A PUBLIC HALL, in Shillong, capital of the Indian state of Meghalaya, to discuss women's rights. The program was organized by the Sam Kam Rin Ku Mai (Societal Restructuring Association). As in other parts of India and Asia, both men and women want to change traditions that have been in existence for thousands of years, but which are now seen as sources of social discrimination.

REPORTED &
PHOTOGRAPHED BY

THOMAS LAIRD

WRITTEN BY

THOMAS LAIRD

&

MICHAEL VICTOR

Yet the battle is not about gaining women's rights, but about diminishing them. The native people of Meghalaya are part of the world's largest surviving matrilineal culture. Some men of Meghalaya feel oppressed by what they now see as a female-dominated society. Outside influences and education have made them realize that they do not have the "natural rights" of their brethren throughout most of the patrilineal world.

Eighteen-year-old Anthony Musonbri speaks emotionally about his fate in this "women's world":

"If I marry and go to my wife's house, I have to be under her control and under the control of her mother, all because I am living in her house. I am a servant really — just a breeding bull."





Photographer/writer/ethnographer Thomas Laird's work has been published widely in Europe and America over the last ten years. But his first published piece appeared in *CoEvolution Quarterly* in 1981 ("Mountains as Gods, Mountains as Gods," #31:116).

Laird has spent most of the last twenty-five years in Nepal. He reports on that country for *Asiaweek*. His most recent collaboration is *East of Lo Monthang: In the Land of Mustang (Shambhala, 1995)*, with Peter Matthiessen.

Michael Victor recently completed a two-year tour with the Peace Corps in Nepal and is currently working with Bhutanese refugees in the southeast corner of the Kingdom. Victor is working on another story with Laird, about traditional hemp cloth production in Nepal.

—Ruth Kissane

Photo opposite: A young Khasi girl in traditional dress. Heavy with intricate golden jewelry, the costume is worn at community events such as dances, to show off the family's wealth and so attract potential suitors.

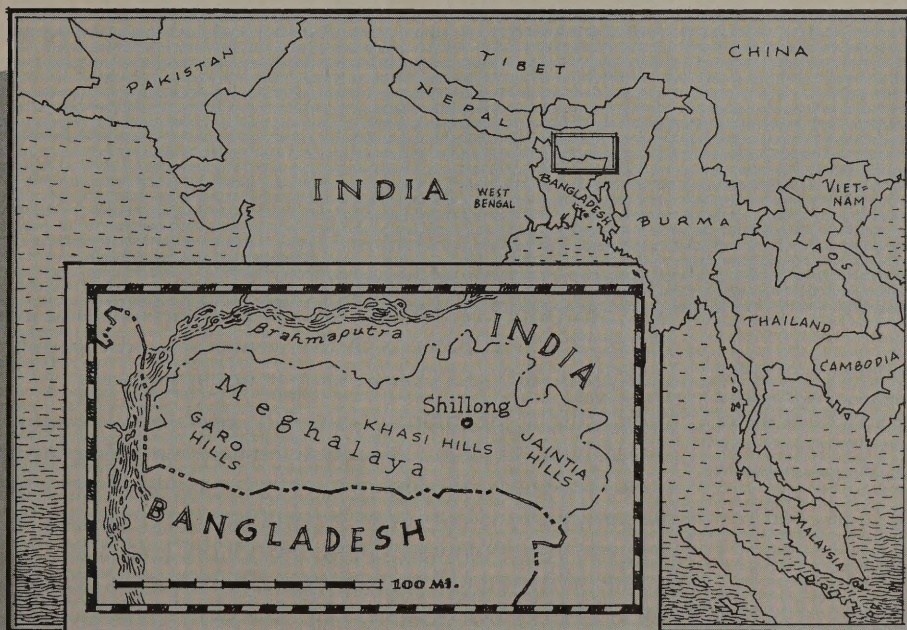
FOR ANYONE BORN into a patrilineal society, and particularly for a male, it is a revealing experience to witness life in Meghalaya. The fundamental assumptions built into 90 percent of the world's cultures are reversed. In the rest of South Asia, women are ruthlessly exploited. One social worker in Kathmandu, the capital of Nepal, put it succinctly: "The law is against us. Men have the full weight of the culture and law behind them, and it leaves the women no rights or ways to find justice. One hundred thousand Nepalese women have been sold off into prostitution in India, where they are nearly slaves. Here, we don't inherit, and we are often sold off to marriages we do not want. We are used as breeding cows by the men."

Since this is the norm in South Asia, it is ironic to hear Meghalayan men complain of their problems. J.D. Lyngdoh, vice president of the Societal Restructuring Association, sounds like a European or American woman activist circa 1960 when he talks of male problems in Meghalaya today.

"We have become like tools for the women. It makes you feel so insecure: everything always belongs to the wife's house. If you don't please her, don't work hard enough, any little thing, then — after six months, or seven children — you are through."

Shillong is still somewhat isolated. But videos and satellite TV have brought the relatively affluent tribal people of the region into full intellectual contact with the rest of the world. What has caused more changes, though, is the fact that since 1960, vast numbers of Indians from the plains of Bengal have moved into North Eastern India.

Yet the indigenous Khasi, Jaintia, and Garo tribes have retained much of their ancient culture. These cousin societies have maintained the matrilineal tradition for thousands of years. Although historical evidence is limited, it appears that the Garo and Jaintia tribes migrated from Tibet, and the Khasi tribe from the Khmer areas of Southeast Asia. In these traditional societies the men have always been traders and warriors and the women have stayed home.



MAP BY
DON RYAN



A Khasi man helps his mother feed his baby. Very uncommon in the rest of India, activities like tending the cooking fire or feeding the baby are "gender-neutral" in Meghalaya.

KHASI WOMEN explain that "because the men were gone for long periods of time, property passed down through the female line, from mother to daughter." And even though men retained political power — in the form of tribal monarchies and clan councils — rights to all power passed from mother to daughter, not from father to son. Although 80 percent of the tribal population is Christian, these old traditions still pervade Meghalayan society.

As everywhere, the language reflects basic cultural assumptions. The Khasi believe the female is the giver of all life, the root of all things. All nouns take a gender form, as with many European languages.

An inanimate object is masculine

until it is put to use. The word for tree is masculine, but when the wood is transformed into any building material, the noun becomes feminine. Likewise, the word for a rock is masculine only when it is not cut and used. So it is with all nouns: something useful is feminine; something unshaped, crude and natural, is male.

Although the women do not seek leadership in either politics or religion — the Khasi have never had queens, only kings, and all priests are male — land power, name, and social rank are passed on from mothers to daughters. Even before the British colonial conquest, kings did not pass power on to their sons. The monarchs were men but the rights to monarchy passed down through the king's youngest sister: so a king could not make his son king; only his sister's son could be king. This forced kings to consult privately with their sisters, just as Khasi men and women control political power today. Men consult their wives before voting in public forums, and the women agree to stay at home when the votes are cast.

Matrilineal is not *matriarchal*. The women do not dominate the men. Here the men have power — but it is inherited from the women. This power structure has created a unique balance between the sexes.

Though women choose whom they will marry, they choose among men who must compete for their hands; marriages are still arranged by the elders. Power at home is in the women's hands; in public it is in the men's. But men and women share in decisionmaking.

Judy Schullai, of Shillong University, describes this unique balance between the sexes: "Women do not suffer here; we walk hand in hand with the man. We are not killed for our dowry, as happens too frequently in India. We are not forced to abort a fetus because of its sex, as happens too frequently in India and China. We are not forced into prostitution just because we want a divorce, as does still happen in village India. Here, in our world, women and men help each other in fact."

Unlike in most of Asia, Meghalayan men move into the woman's house when they get married. This has quite a disturbing effect on the young men. J.D. Lyngdoh:

"We have been born and brought up in one environment. In our own mother's house they teach us a way of life. And then suddenly twenty-five or thirty years later, we are taken to our wife's house, which has a new environment and atmosphere. I can't tell you how scary and intimidating that process is."

Again, this is a disturbing echo of young women's concerns throughout the rest of Asia, today, and much of America and Europe, very recently. But Professor Schullai vehemently denies any similarities between women in Meghalaya and women in the West.

"The whole Western idea of women's liberation is odd to me, because somehow, women want to be on top of men in that concept. I don't want to dominate men, I want to walk side by side with them. Men and women are different. We are not the same. Therefore we have to work together."

THE WAY this culture deals with rape graphically illustrates the unique power of sharing and trust. Rape is very rare, but recently in Shillong a woman was raped and the whole locality took the law into their own hands. Justice was simple: the man was found and beaten to death. No jury, no trial, no thought that the woman was lying or at fault; her word was enough.

R.T. Rynbai, an ex-minister and a historian of Khasi culture, explains: "Rape is a thing that the Khasi consider as sinful as murder. In the olden days, they would bring straps and tie the guilty man down and then proceed to crush him with huge logs." Quite different from justice for victims of rape in the "liberated" West, where it takes countless hours of testimony and questioning to actually believe a woman is a victim of rape. While Professor Schullai does not approve of mob justice, she was equally shocked to hear that multiple rapists in the West still walk the streets looking for their next victim.



Unlike boys nearly anywhere else in Asia, this young goatherd will not inherit any of the family land or livestock. In accordance with matrilineal tradition, they will go to his sister.

R.T. Rynbai expressed his idea of rapists clearly enough. "Traditionally we feel that rapists, like murderers, are no longer human. They are like rabid dogs: how do you treat rabid dogs in your country?"



Sixty-eight-year-old Khasi villager Mawlong, a firm supporter of the matrilineal system. "According to the system that God has given us," she says, "It is for a man to leave the house — to go out to work and earn, and to marry into another clan. The woman is the one who gathers, who looks after the home and hearth."

Sexual taboos are inherent in most patrilineal cultures, especially those found on the Subcontinent. In Hindu and Muslim cultures there is little open discussion of sex and strong streaks of puritanism, and prurience runs deep within both cultures. Judy Schullai: "It is well known that most Indians find the idea of oral sex or anything but the missionary position to be taboo. I mean the Brahmins expect their women to kiss their feet, so you can imagine what they expect in bed. Just subservience!"

The men also find the difference between Meghalayan and Indian culture quite strange. Mr. Rynbai remembers vividly the first time he ventured down to the plains of India. When he visited West Bengal, a state only a few hundred miles away, he was shocked at the physical scarcity of women.

"Everywhere I went, I looked for the women. They were nowhere to be seen. It was depressing to discover that the women were hidden away: that they were not heard and not seen. So different from our world."

Divorce procedures are vastly different from those practiced by patrilineal cultures. Before the arrival of Christianity, divorce was easy for a woman. If she was having problems with her husband, her clan would intervene; or she could publicly declare that she was divorced, and she was. Mr. Rynbai explains: "Divorce was so simple. And you know it was the Christian religion that complicated it. What I'm trying to say is that certain modern things are not conducive to our system and would have been better left as they were."

BEFORE MODERN TRANSPORT arrived, this region was one of the more isolated corners of the world. But today it is under pressure, from without and within. Indians from the plains are increasingly interested in the coal, timber, and other resources of the North East in general. Because of the contorted regional geography, Meghalaya is the conduit through which the resources of North East India must move to the plains and the market.

The last twenty years have seen a vast influx, legal and illegal, of plainsmen from Bangladesh and India. Contact with the outside has changed many Meghalayan males' self-perceptions.

Some Khasi men, and even some women, now believe that their traditional matrilineal society is "backward" or even "uncivilized." Like indigenous people nearly everywhere, the people of Meghalaya are perhaps overly concerned to be seen as "modern." People are very open about these feelings. It is "modern to have a patrilineal society. There is no way to develop properly in a matrilineal society. The Bible and God do not talk of a matrilineal society, but of a patrilineal society."

Such complaints reveal an overriding shame that the local men feel for living in what plains Indians and others might simplistically see as a world dominated by women.

J.D. Lyngdoh ironically expressed this feeling when trying to articulate why the Meghalayan system must end: "Our old system could have gone on forever if we were alone here. But during the past fifty years a lot of plainsmen have moved here. When you mix all the communities up, when you get an education, you find that you have this humiliation. That you are not really a man."

Ivan Rindoh Johnson's story will sound all too familiar to many women. His Irish father married a Khasi woman. When he died in World War II, instead of Ivan receiving his inheritance, it went to his sister. When his sister married, the problems began.

"My life is ruined by the man my sister married. We didn't get along and he now controls my sister's property. I don't have any resources now. And he originally had nothing. What he has now, in a patrilineal system, would have been mine. My life has been ruined by this culture."

Ivan wants "modern, Western, Christian" thought to save him. He says that the real reason a patrilineal system is needed is because "The Bible is in favor of the patrilineal system. And once you have received Jesus Christ, you should forget all these old things."

Depression, anger, and resentment are pervasive among young men in the small villages where tradition is strongest.

One says, "It should be equal. Men always feel dominated here. They look after the girls more here. I see it in school. It is almost like saying, 'Well, this boy will not live in this house, so why should I spend my money on him?'" Once again, with a change of gender the same words could be put into the mouths of oppressed women throughout Asia.

After puberty, this discrimination breeds a sense of hopelessness. Many young men turn to drink; unlike their Hindu and Muslim counterparts in the rest of India, their religion does not forbid drinking. Coming from "dry" West Bengal, roadside bar signs in Meghalaya would shock almost anyone. "Drive In, Stagger Out," says one. Alcoholism is rampant in the Indian North East.



In a blend of native and imported tradition, a Khasi bride escorts her husband from the Christian church where they have just been married to her home, where he will live.

MEGHALAYAN MEN'S disenfranchisement in their own state is also seen in the problem of land ownership. The plainsmen are moving in quickly and have already become the majority of the population. Legally



the plainsmen cannot own land. It appears that some outsiders have married tribal women and then registered land in the names of their wives. The perception (whether true or not) that this was being done by large numbers of plains Indians has caused rioting and demands for legal changes. Theoretically, a plains Indian could gain ownership of land from his tribal wife, then divorce her and keep the land. Some young Khasi men use this question of immigration and land ownership as the reason to end the matrilineal system. You hear comments that "the ignorant tribal women are used and then abandoned."

The Khasi Students Union (KSU) has been particularly eager to exploit the immigration issue as a way to change the culture. Recently, they tried to push through the legislature a law that would banish a woman from Khasi life if she married a non-tribal man. Paul Lyngdoh, president of the KSU, seems to think that under a patrilineal system there would be no immigration problems. He feels that the Khasi women are "being used and need to be protected for the preservation of their own culture." As he talks about immigration, though, other issues surface.

"This all goes back to the matrilineal system. When all the family wealth goes only to the women, it makes you practically dependent on them. And this is why at this stage we feel exploited from all sides, from all spheres of life: education, family, and politics."

Mrs. Roshan Waji, a member of the state legislature, does not feel that local problems stem from the matrilineal system but from the men and their own problems. She feels the men are bringing up this issue of matrilineal society because they need a scapegoat for their frustration.

"The rise in frustration is due to unemployment. We need a firm policy from the government. Changing our culture will not make a difference in this area."

Village dances are political events as well as social occasions in Meghalaya. These exuberant young men, traditionalist supporters of the matrilineal system, proudly wave their party's flag.



Judy Schullai agrees that the Khasi culture needs to protect itself from the plainsmen, but suggests that the issues of land ownership and immigration are being used by the KSU and the Societal Restructuring Association as means to gain power.

"There might be one or two bad cases where a man came up from the plains and cheated the system, but in most cases where these men have married Khasi women, they have settled and brought up their children here and looked after their wives well. And, you know, in our system the children are Khasi. It is the matrilineal system that has kept our society strong. You cannot always stop people from coming in, but when their children become Khasi, that shows the strength of our society, doesn't it?"

"If we were patrilineal, then every outsider coming in here to marry would have 'polluted' our bloodline. In the current system, we simply absorb outsiders."

ON MY LAST NIGHT in Meghalaya, I went to a traditional dance outside of Shillong, in a village whose people are still strongly matrilineal. Many still subscribe to the pre-Christian faith. As the dance began, the endless rhythm of Khasi culture emerged. The unmarried women danced slowly in long lines, at the center of the circle; the young men and boys pranced around the edges, in a warrior protection dance. The men and women never touched. They clearly danced to different beats within the same melody: the two halves of life moving differently to the same rhythm.

Such dances are used for the women to display their wealth and attract potential husbands. Yet they are dances of Khasi life: the women sustaining and cultivating the center of life, of their universe, while the men fiercely guard the fount of life.

A priest described the basic tenets of the dance and Khasi culture.

"Our tradition has been like this since time immemorial. The mother is the source of life. God has bestowed upon her this power. We should respect that and follow her lineage. The mother is the source of everything and so we must follow this system."

Leaving the dance I pondered this and wondered about something that Roshan Lyngdoh, a young student, had told me: We can't change tradition.

"How can we change tradition that has been around thousands of years? Most probably we'd lose our culture."

His question goes to the heart of the matter. In this women's world, men face the same struggle for equality as women elsewhere in the world. What parallel can one draw when a traditional matrilineal society defends its advantages with the same arguments as those used by male-dominant societies to defend theirs? Perhaps the questions raised by Khasi culture are ones of human conditioning, rather than of gender. ♀



A priest of the Sin Khasi religion performs a ritual in a sacred forest. This ancient shamanistic rite is at the root of the Khasi matrilineal system.

BY BETSY
HARTMANN



Elizabeth Fisher

These demonstrators are advocating the availability of appropriate birth control methods that would be under control of the women using them.

The Double Challenge

Claiming the ground between anti-abortion fundamentalism and aggressive population control programs

REPRODUCTIVE-RIGHTS ACTIVISTS from around the world gathered in China last September. While some lobbied government delegations at the official UN conference in Beijing, the great majority focused their efforts on the NGO (nongovernmental organization) Forum on Women in Huairou, a distant suburb of Beijing. The Chinese government banished the forum from its original site in central Beijing because it feared the possible impact of women's demonstrations on its own citizens, who have not been allowed to protest openly since the 1989 Tiananmen Square uprising.

The NGO leadership's decision to accept the Huairou site remains controversial. But the deeper controversy concerned holding the UN Women's Conference in a country with the lowest ratio of girls to boys of all the world's children. Coupled with son preference, China's repressive one-child population policy and its variants have led to sex-selective abortions, the escalating abandonment of female infants and girls, the creation of a large "hidden" unregistered population of girls, and even cases of female infanticide. Women's bodies have borne the brunt of forced sterilizations and late abortions in the government's drive to meet rigid birth quotas.

On the positive side, holding the conference in China may give a boost to struggling women's movements there. However, few Chinese activists were allowed to attend the NGO Forum; those who were had their presentations screened by security panels, and their activities were closely watched. Even the term "reproductive rights" was considered subversive by state authorities.

Within the bounds of the forum site, foreign participants enjoyed more freedom of speech. Reproductive-rights activists, like the thousands of activists from other fields, made the best of an imperfect situation.

A unifying theme

Reproductive rights do not just mean abortion rights or access to family planning. In the words of the Women's Global Network for Reproductive Rights, they mean "women's right to decide whether, when and how to have children — regardless of nationality, class, ethnicity, race, age, religion, disability, sexuality or marital status — in the social, economic, and political conditions that make such decisions possible." They include the right to economic security, to a safe workplace and environment, to quality childcare, to freedom from coercion and violence, and to a health system that provides a full range of services, including prenatal care, safe, voluntary birth control and abortion, and sex education.

Reproductive rights thus depend on achieving basic rights in almost every sphere of life. For while reproduction may be an intensely personal experience, it is also a fundamentally social one, at the center of a web of human relations. Reproductive rights are a vital part of struggles for economic, social, and gender justice and cannot be viewed in isolation from them. —BH

was the double challenge women face in controlling their sexual and reproductive lives. On the one side are fundamentalist forces — the Vatican, conservative Islamic movements, the Christian Right — who seek to deny women access to contraception and abortion as a way of enforcing patriarchal dominance. On the other are population control programs which aggressively limit women's fertility through unsafe and unethical means.

The Cairo Consensus

In several workshops at the forum, women debated just how much progress had been made since the 1994 UN Population Conference in Cairo. The so-called "Cairo 'consensus'" endorses a women's empowerment/reproductive health approach to population stabilization, instead of narrow, target-driven family planning services. Many women's groups fought for this shift, but tension remains between those groups willing to work within a population framework, and those who question the failure of the Cairo consensus to criticize the capitalist economic model, and Cairo's focus on population growth instead of inequality.

Activists also revealed the large gap between the Cairo rhetoric and reality. In Bangladesh and the Philippines, for example, conventional population programs that limit women's contraceptive choices and offer little, if any, health screening or follow-up are now calling themselves "reproductive health services." Gita Sen of DAWN was more optimistic about the situation in India, where, she said, the government is now willing to work with women's groups and is abandoning contraceptive targets in several pilot population programs. By contrast, Mira Shiva of the People's Health Network lambasted the Indian government for cutting basic health expenditures at the same time that it is increasing spending on population control.

In the United States, the Cairo consensus has given a liberal veneer to a hostile agenda of blaming poverty, environmental degradation and political instability on the fertility of the poor, rather than on the production and consumption patterns of the rich. On the international stage, the Clinton administration supports



Women's health advocates must distinguish their critique of population control-driven contraceptive research from the anti-abortion movement's opposition to virtually all forms of birth control.

women's empowerment, but at home it has endorsed welfare "reform" measures that will have a devastating effect on poor women and children. The US also continues to finance abusive population programs in countries such as Indonesia and Bangladesh, despite Hillary Clinton's strong condemnation of coercive family planning in China.

The current "feminist" face of population control also helps to mask the potential risks of several controversial new contraceptives. At the forum, the North Carolina-based promoters of quinacrine, a chemical female sterilization method linked to a number of dangerous side effects, advertised it as a way to improve women's health. In a classic example of doublespeak, their training video was produced by the "Empowerment Project." Neither the World Health Organization (WHO) nor the US FDA has approved

quinacrine as a sterilizing agent. Both are concerned about its risks. Yet private US population agencies have financed quinacrine trials in eleven Third World countries. In Vietnam, 30,000 women have been sterilized with quinacrine.

Contraceptive "vaccines" that operate on the immune system offer a classic example of the double challenge women face in securing access to safe birth control and health care. The Women's Global Network on Reproductive Rights has launched a campaign against contraceptive vaccine research because it imposes unacceptable health risks and has the potential for widespread abuse in population control programs. At the same time, one of the largest anti-abortion groups, Human Life International, has spread false rumors in Tanzania, Mexico, the Philippines, and Nicaragua that WHO-provided tetanus injections are being laced with antifertility vaccine. This has had a disastrous effect on public immunization campaigns.

Women's health advocates must thus continually distinguish their critique of population-control-driven contraceptive research from the anti-abortion movement's opposition to virtually all forms of birth control. Demonstrating against hazardous contraceptives,

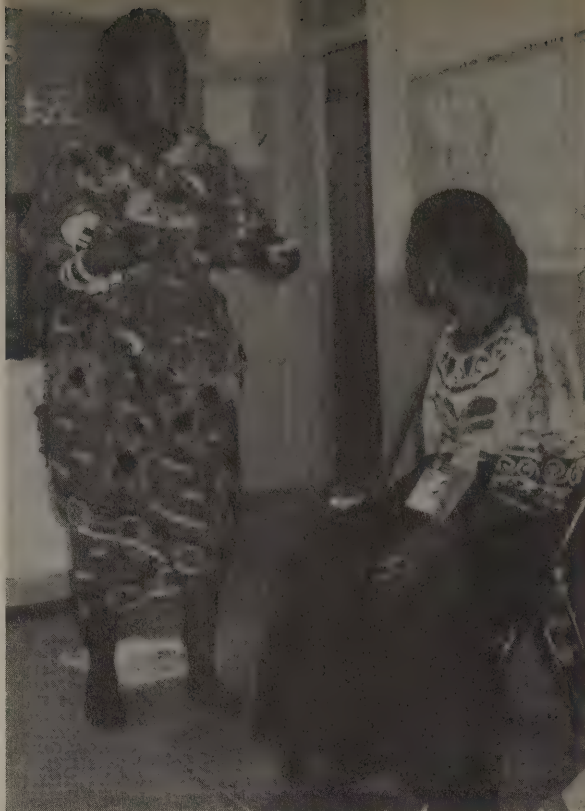
feminists at the forum held up banners proclaiming "Feminists for abortion rights and birth control, not population control" and "We want user-controlled methods of contraception."

The Personal is Political

A dramatic presentation by two women's organizations from Nigeria and Zambia cast into sharp relief the problems individual women face in controlling their bodies and lives. In the skit, a Nigerian woman has a sick child. Her husband refuses to help her. She travels to a distant health clinic, but the nurse there blames the baby's malnutrition on the woman's having too many children. Instead of treating the child, the nurse prescribes birth control pills, without counseling or medical screening. When the woman returns home, her husband is angry that she has accepted the pills; he kicks her out of the house. There is clearly no such thing as "choice" in this context.

The skit inspired heated discussion about the situation in Nigeria. Structural adjustment programs imposed by the World Bank and International Monetary Fund have slashed public-health expenditures, but foreign money flows to universities and the medical establishment for trials of Norplant and other long-acting contraceptives. Meanwhile population programs ignore traditional birth control, such as abstinence, breastfeeding, withdrawal, and even the condom.

One of the biggest problems is that men are left out of the family-planning picture, and without greater male responsibility, there is little hope of improving women's situation. According



Marlene Fred

In this skit a Nigerian woman with an ailing child finds neither help nor healing from a health clinic.

to Adetoun Ilumoka of Nigeria, married women have a harder time making their husbands use condoms than single women, who have more power. A woman from South Africa spoke of a pilot "father's morning" project: men come to the health clinic to learn about male responsibility in making and raising children.

Women's Environment & Development Organization

WEDO is an educational nonprofit organization. Its focus is on making women more visible as equal participants, experts, and leaders in policy-making, both locally and internationally. Founded by Bella Abzug and Mim Kelber, the group works to formulate alternative, healthy, and peaceful solutions to world problems. For example, WEDO plays an active role in the National Coalition for Health and Environmental Justice, stressing the importance of environmental activism and justice at the grassroots level. WEDO examines cancer's environmental links, particularly for breast cancer, and in 1996, it will co-sponsor a World Conference on Breast Cancer in Kingston, Ontario. For several years now, WEDO has worked for recognition of women's roles in population and development issues. —M.J. Pramik

Women's Environment & Development Organization
845 3rd Avenue, 15th Floor, New York, NY 10022; 212/759-7982, fax 212/759-8647, email wedo@igc.apc.org.

Despite the multiple problems they face, many women manage to negotiate some control over their sexuality and reproduction. This was the message of a panel presentation by the International Reproductive Rights Research Action Group, which has conducted interviews with a broad range of women in Brazil, Egypt, Malaysia, Mexico, Nigeria, the Philippines and the US. In Egypt, for example, though abortions were forbidden by religion or their husbands, women still had them clandestinely when they needed to for health or economic reasons. Women's ability to negotiate control increased with education, access to information about sexuality, and sources of income and organizational support (such as women's groups) outside the home. Without these resources, reproductive rights prove elusive.

Change is necessary at the personal as well as the institutional level. Self-help was another

powerful theme at the forum. A workshop on translating and adapting *Our Bodies, Ourselves*, menstrual-extraction training sessions, sharing strategies on coping with AIDS — all these contributed to strengthening the roots of the women's health movement.

In a workshop called "Political Environments: Resistance and Strategies for Change," Byllye Avery, founder of the National Black Women's Health Project, reminded activists that they also need to take care of themselves and take time out to refresh their energies. In a compelling example of how the personal becomes political, Dina Nfon Priso from the Cameroon spoke about how her own experience as a battered woman has inspired her activism against domestic violence. As a doctor, she works with people with AIDS, and understands the need to work with their psychological as well as physical health.

Abortion Wars

Pro-choice forces were much stronger at the forum than anti-abortion groups, who did not disrupt meetings as they had at Cairo. The anti-abortion movement is particularly active in Eastern Europe and the former Soviet Union, where it is working to overturn liberal abortion legislation.

One pro-choice strategy is to use human rights covenants to press for decriminalization of abortion. A Chilean activist said that the language of human rights is more acceptable in her country than that of women's autonomy. Only the very poorest women are jailed for having abortions; thus, the law can be challenged on the basis of economic discrimination.

Even where abortion is legal, access remains a critical problem in many countries. In the US, violent attacks on clinics, lack of Medicaid funding, parental-consent laws, and the absence of trained providers limit many women's access to abortion. In India, women with two or more children seeking abortions in public clinics are often told they must consent to sterilization first, making a mockery of choice. Meanwhile, for those women who can

pay, private clinics in many Indian states are providing amniocentesis and sex-selective abortion of females.

The Vatican was very much present at the official UN conference in Beijing, though it too kept a lower profile than it had in Cairo. In Beijing, Catholics for Free Choice and other women's networks launched a campaign to get the Vatican's status downgraded at the UN from non-member state to nongovernmental organization, which would greatly diminish its power.

The final draft of the official Platform for Action acknowledges women's rights to control their own sexuality and childbearing and to be free of violence, but it fails to guarantee women the right to safe, legal abortion. In a small step forward, it calls for the review of laws "containing punitive measures against women who have undergone illegal abortions." There is still a long way to go.

Beyond Beijing

Although the NGO Forum afforded an important opportunity for reproductive-rights activists to meet, much unfinished business remains to be addressed outside of the UN framework. Over the last few years, women's groups have devoted an inordinate amount of their energy and resources to influencing the UN process. But despite progress at the international level, the situation of women in most countries has worsened, with economic restructuring, mounting violence, and the double challenge of fundamentalism and population control.

Our ability to defend and advance women's rights, including reproductive rights, depends on the existence of a strong, independent transnational women's movement that is capable of mobilizing grassroots support. It is time to rethink and revitalize that movement as we move beyond Beijing.



Betsy Hartmann is director of the Population and Development Program at Hampshire College, a founding member of the Committee on Women, Population and the Environment, and the author of *Reproductive Rights and Wrongs: The Global Politics of Population Control* (South End Press, 1995) and co-author of *A Quiet Violence: View from a Bangladesh Village* (Food First Books and Zed Press, 1983).

Committee on Women, Population, and the Environment

This US-based women's group questions the popular concept that the increase in world population is responsible for all of today's problems. The signatories (over 300) contend that it is not irresponsible procreation by Third World women that's causing global environmental degradation. They believe the following are wrecking Mother Earth: economic systems that exploit and misuse nature; rapid urbanization and poverty from rural migrations; disproportionate consumption patterns of the affluent; technologies that take from, but do not restore, nature; and war-making and arms production.

CWPE offers positive criticism of the United Nations Fourth World Conference on Women for having a democratic meeting in an antidemocratic country. CWPE intends to become an imaginative transnational women's movement to set agendas (even outside the United Nations) to work for peace, freedom, ecological sustainability, and just economies — "where all women can speak our truths anytime, anywhere, and live vital, full, healthy lives free of violence and fear." —Mary Jean Pramik

Committee on Women, Population and the Environment: c/o Population and Development Program, Hampshire College, PO Box 5001, Amherst, MA 01002; 413/582-5506, fax 413/582-5620.

Beijing and Beyond

VANDANA SHIVA RE-FOCUSES THE HUMAN RIGHTS AGENDA

MEDIA COVERAGE OF THE BEIJING CONFERENCE suggests that the world's largest conference concerned China, not women. Even Gertrude Mongella, Secretary General of the Conference, had to chide the media for harping on logistical and political issues rather than issues affecting women.

Most of the media focus has been on the site of the NGO Forum. Huairou, described as a distant, muddy and primitive site in most media reports, is actually a beautiful resort with full tourist facilities and hotels. In fact, the NGO Facilitating Committee focused the energies of women's organizations and movements across the world by initially refusing to accept Huairou, even though it is manifestly appropriate for NGO activities because it is in a green area, has tourist facilities, and offers open spaces for self-organizing. The NGO Forum site and arrangements at Huairou surpassed what was available to NGOs in Nairobi, Rio, Cairo, and Copenhagen.

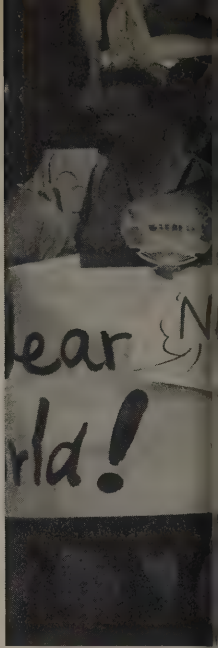
HUAIROU means "be kind to the barbarians" in Chinese. Ironically, what should have been a celebration of cultural diversity and civilization exchange was reduced to a jarring encounter between Western (mostly American) and Chinese sensibilities — with each considering the other to be barbaric. The Americans had projected China to themselves and the world as a primitive society, not one of the oldest civilizations. (This could be observed in microcosm in the strange interactions between the Americans and their Chinese taxi drivers. It was assumed that because the taxi drivers did not speak English, they were stupid.) The refusal to recognize and respect cultural diversity has prevented the West from being a successful guest of other cultures. The inability to be a guest creates the behavior of the colonizer.

HUMAN RIGHTS WATCH, a US group, prepared and distributed a booklet — "Your Rights in Beijing: A Brief Guide for Delegates" — in preparation for the conference. The booklet has sections on "getting your message across: restrictions on freedom of expression" and on "Security, Surveillance and Safety." The false apprehensions created among US participants by such propaganda became evident to me when, traveling from the airport to the hotel, a puzzled American guest asked, "Where are all the military?"

The "language of surveillance" used by Human Rights Watch, by Hillary Clinton, and even by the NGO Committee sought to present the Beijing Conference in a very different light from the reality of the situation. (Given that Timothy Wirth of the State Department had last year announced that "women's rights" would be an important weapon used in US foreign policy, this should not come as too much of a surprise.) Besides giving the world a false picture of the Beijing Conference, the US-led speeches, literature, and media coverage constructed a narrow definition of human rights that excludes rights based on economic, environmental, and social justice.

Speaker after speaker insisted that women's rights are inseparable from human rights. But the individual's right to meet basic needs does not figure in the US discourse on human rights, even though in the Third World the denial of basic needs is the real issue of violation of human rights. This will also increasingly be the central human right to be violated in the North, as globalization leaves larger numbers unemployed and homeless.

The Beijing conference provides an opportunity





Not all energies at the Beijing conference were focused on reproductive rights — here Japanese women demonstrate against nuclear testing.

THOUGH BOTH the official conference document and the official NGO Forum in Beijing made an attempt to undermine the contributions of Nairobi and Rio, women from the environmental movement were present in large numbers and had organized interesting events. The French nuclear test in the Pacific was protested by many women. Indigenous women from the US talked of uranium mining in native lands and the violation of indigenous people's rights by the US government (which preaches human rights to the world). The environmental-justice movement of the US held a very dynamic workshop about selective dumping of toxics in poor and coloured communities and Third World countries. Seventy organizations had woven together a nine-day program of activities on emerging issues — on trade, intellectual property rights, technology, communication, militarization, health and environment, resurgent and emergent epidemics. However, the NGO Facilitating Committee split the events and put them in different venues, diffusing their focus on the emerging issues to which women are responding. The NGO Committee also canceled the rally planned by the 180 Days/180 Ways Women's Action Campaign, to make the venue available for Hillary Clinton's speech. (Mrs. Clinton's speech focused on the violation of NGO rights by Chinese authorities. The Chinese later told the US, politely and indirectly, to mind its own business.) The role played by the committee in excluding NGOs and undermining their activities at the forum has not become known, because the Chinese authorities were constantly blamed for actions and decisions taken by the NGO Committee, which seemed to do anything but facilitate. Among the committee's arbitrary actions was the fixing of a \$50 registration fee, which excluded a large number of Third World delegates, and the denial of conference access to thousands of women on the grounds that their registrations were late. I was refused registration for the forum, although I was registered at the UN conference in Beijing. I finally made it into the conference on the strength of press accreditation, over which the NGO Committee had no control.

The committee plenaries focused on making women adjust to the New World Order. Women's movements, on the other hand, are demanding that

to widen our thinking about human rights to include issues of economic justice. "Human rights" in this context includes the right to influence the kind of production and consumption systems we have and the right to enough economic, political, and environmental space to meet basic needs.

China, the world's most populous country, has undertaken the largest experiment in this century in attempting to make good on the fundamental human right to food, clothing, and shelter. Instead of focusing on this tremendous endeavor, the US and its lobby groups have focused only on China's violation of relatively narrowly construed human rights.

THE NARROW NOTION of human rights that distorted the Beijing agenda is also exemplified in the way that women's health rights have been reduced to reproductive rights, and the way the phrase "reproductive rights" has become synonymous, by implication, with "population control."

Third World women protested against this narrowing and distortion by holding a series of seminars on women's *comprehensive* health rights, and on environmental links to health — aspects that are being systematically excluded by the population establishment, USAID, and the World Bank. A protest was organized against hazardous, long-acting contraceptives such as Norplant. There has been a deliberate attempt to reduce women's concerns to those of reproduction alone, and to link the Beijing conference exclusively to the population conference in Cairo. The slogan "Remember Cairo" on buttons distributed by UN agencies tacitly suggests: "Forget Rio" and "Forget Nairobi." But as Dr. Mira Shiva said at the Norplant demonstration, "Women are not just wombs and tubes."

A street theater group performs at the NGO Forum in Beijing.



Elizabeth Fisher

the global order adjust to the needs of women, which best reflect the needs of society as a whole. Since the NGO facilitating Committee also overstepped its role by usurping the space from women's movements and groups and monopolizing the largest halls and plenaries for events they themselves organized, the movements created their own space.

As a result, there were not one but two NGO Forums. One reflected the priorities of the economically and politically powerful global interests. The second — the free and independent NGO Forum — reflected the concerns of movements, through events and activities created through self-organization. Since the allocation of rooms for events had been manipulated by the forum secretariat, the real concerns of women could be seen in the activities they organized in the open spaces — the rallies, the sit-ins, the protests.

One of the most impressive events was the silent march of the Women in Black. For one hour, women stood silently in a vigil outside the Global Pavilion. They held up banners

calling for peace in Palestine, Bosnia, Rwanda. The Women in Black actions, which started in Palestine and spread to ex-Yugoslavia, have been undertaken by women across the world as a call for peace. At the Huairou action, a speaker from Belgrade said that peace and nonviolence are rooted in the acceptance of diversity. That is probably the strongest message from Beijing — that diversity is strength, not weakness — in the women's movement, in society, and across civilizations.

THE STRENGTH of the women's movement has always been that it is built on compassion, solidarity, and cooperation, not on

Staying Alive

If you've been looking for just the right words to describe the historical and conceptual origins of "development," try "a post-colonial, western patriarchal project of wealth creation."

Dr. Vandana Shiva critiques the economic assumptions of western patriarchy, charts the muddy waters of the scientific revolution, and documents how development has exacerbated the food and water crisis in India by degrading and destroying nature's capital and ignoring women as experts and producers of food.

In response, countless women in India are putting their lives on the line not only to save their forests, fields, livestock, and families, but also to save civilization and reclaim the feminine principle: a nonviolent, non-gendered, and humanly inclusive alternative to maldevelopment, scientific reductionism, western patriarchy, and the market economy.

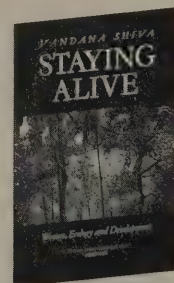
—Nathan Boone

• The paradox and crisis of development arises from the mistaken identification of culturally perceived poverty with real material poverty, and the mistaken identification of the growth of commodity production as better satisfaction of basic needs.

• The temples of ancient India, dedicated to the river goddesses, were substituted by dams, the temples of modern India, dedicated to capitalist farmers and industrialists, built and managed by engineers trained in patriarchal, western paradigms of water management. Water management has been transformed from the management of an integrated water cycle by those who participate in it, particularly women, into the

exploitation of water with dams, reservoirs and canals by experts and technocrats in remote places, with masculinist minds.

• Agricultural 'development' or modernisation has split the activity into two sectors — the highly visible, globally planned and controlled and state subsidised production for profits and markets, and the less visible, sometimes invisible, decentred self-provisioning of food through what is commonly called subsistence farming. The 'masculinisation' of modern, chemical intensive and mechanised, capital intensive agriculture, and the 'feminisation' of traditional subsistence food production which feeds the bulk of the rural poor, is now being recognised worldwide. This dichotomy has been accentuated with modern production and distribution systems which are integrated into global markets and are introduced through male-oriented international aid and financing which has become a major factor in excluding women's access to conditions for producing food.



Staying Alive

(Women, Ecology and Development)
Vandana Shiva. Zed Books, Ltd.,
1988; 224 pp. ISBN 0-86232-823-3
\$17.50 (\$20.50 postpaid). Humanities Press
International, 165 First Avenue, Atlantic
Highlands, NJ 07716; 908/872-1441

competition and privilege. The women's health movement grew out of "successful" women doctors treating women as subjects, not as objects, of medical science and technology. The environment movement grew because women scientists like Rachel Carson were humble enough to "listen to nature," not try to enslave her in the Baconian vision of control and mastery. But this vision of connectedness between planet and people, and between the privileged and those who have been marginalized, has failed to inform the officially organized NGO Forum. Nor does it inform the UN conference. The poster prepared by the UN for the Beijing Confer-

ence, representing a woman holding the planet in an attitude of control, shows how deeply the symbols of domination and mastery have been internalized by the official system. This imagery of humans being external to and controlling the planet was severely criticized by environmentalists at the Rio Earth Summit. Now the same image of domination has been linked to the women's conference.

It was the humility and compassion maintained by women who were privileged and who rose in their professions, but who were conscious of the needs, aspirations, strengths, and rights of their less privileged sisters, that showed that other ways were nec-

essary to organize our lives, our thoughts, our actions in order to ensure justice for all. This search for alternatives — guided by the values of justice in economics, in science and technology, in agriculture, in medicine, in politics — is still alive in the women's movement and was expressed in the activities of the free and independent NGOs in Huairou.

The message of the self-organized, movement-based NGO Forum activities is that all forms of domination need to be resisted and overcome. In place of domination, women want solidarity. In place of violence, they want peace. In place of injustice, they want justice. However, they want a justice that is not separate from other forms of justice on gender or any other grounds. For women's movements, justice and equality are indivisible. Justice means environmental justice, economic justice, social justice, and gender justice.

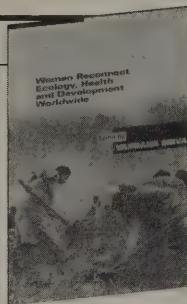
It is this concept of indivisible justice that will guide the struggles of women's movements in the deeply divided, globalized world after Beijing.

A scientist, social critic, and activist, Vandana Shiva is the director of the Research Foundation for Science, Technology and Natural Resource Policy in Dehra Dun, India.

Close to Home

Across the world, women are rebuilding connections with nature and with other women striving for clean and healthy places to live and work. Recognizing that our health depends on the health of our environment and communities, women are challenging greed-driven corporations and governments.

*This book was inspired by the seminar "Women, Ecology and Health: Rebuilding Connections," held in Bangalore, India, in 1991. **Close to Home** will inform and energize readers who are concerned about environmental justice, north/south relationships, and the misuses of technology. —Tova Green*



Close to Home

(Women Reconnect Ecology, Health and Development Worldwide)
Vandana Shiva, Editor. 1994;
176 pp. ISBN 0-86571-264-6
\$12.95 (\$15.45 postpaid). New Society Publishers, 4527 Springfield Avenue, Philadelphia, PA 19143; 800/333-9093

■ We see the spread of violence as the culmination of patriarchal projects in which the potential for death and destruction is far greater than for the sustenance and reproduction of life. . . . The feminist response to violence against women, against nature and against people in general attempts to make the production and sustenance of life the organising principle of society and economic activity. Whether it is the technological terrorism of Union Carbide in Bhopal, or the terrorism of racism, fundamentalism and communalism in Europe, Pakistan, India and Sri Lanka, we see a culture of violence and death extinguishing a culture in which life is generated, protected and renewed. It is in reclaiming life and recovering its sanctity that women of our region search for their liberation and the liberation of their societies.

■ The land, the forests, the rivers, the oceans, the atmosphere have all been colonised, eroded and polluted. Capital now has to look for new colonies to invade and exploit for its further accumulation. These new colonies are, in my view, the interior spaces of the bodies of women, plants and animals.

The invasion and take-over of land as colonies was made possible through the technology of the gunboat; the invasion and takeover of the life of organisms as the new colonies is being made possible through the technology of genetic engineering.

Biotechnology, as the handmaiden of capital in the post-industrial era, makes it possible to colonise and control that which is autonomous, free and self-regenerative.

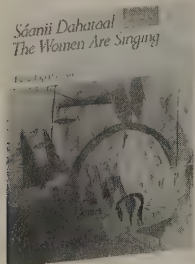
■ The main contribution of the ecology movement has been the awareness that there is no separation between mind and body, human and nature. Nature is constituted in the relationships and connections that provide the very conditions for our life and health. This politics of connection and regeneration provides an alternative to the politics of separation and fragmentation that are causing ecological breakdown, and is one of solidarity with nature. This implies a radical transformation of nature and culture such that they are mutually permeating, not separate and oppositional. By stating a partnership with nature in the politics of regeneration, women are simultaneously reclaiming their own and nature's activity and creativity.

Sáanii Dahataal

Luci Tapahonso writes of her New Mexico — Shiprock, New Mexico — where the San Juan river runs softly through a land alive in the stories and poetry of the Navajo world. She writes of her childhood and her present, of relatives and one-time pets, of half-dreams and memories. This is a loving collection of voices from the hand of one woman. —Yolanda Montijo

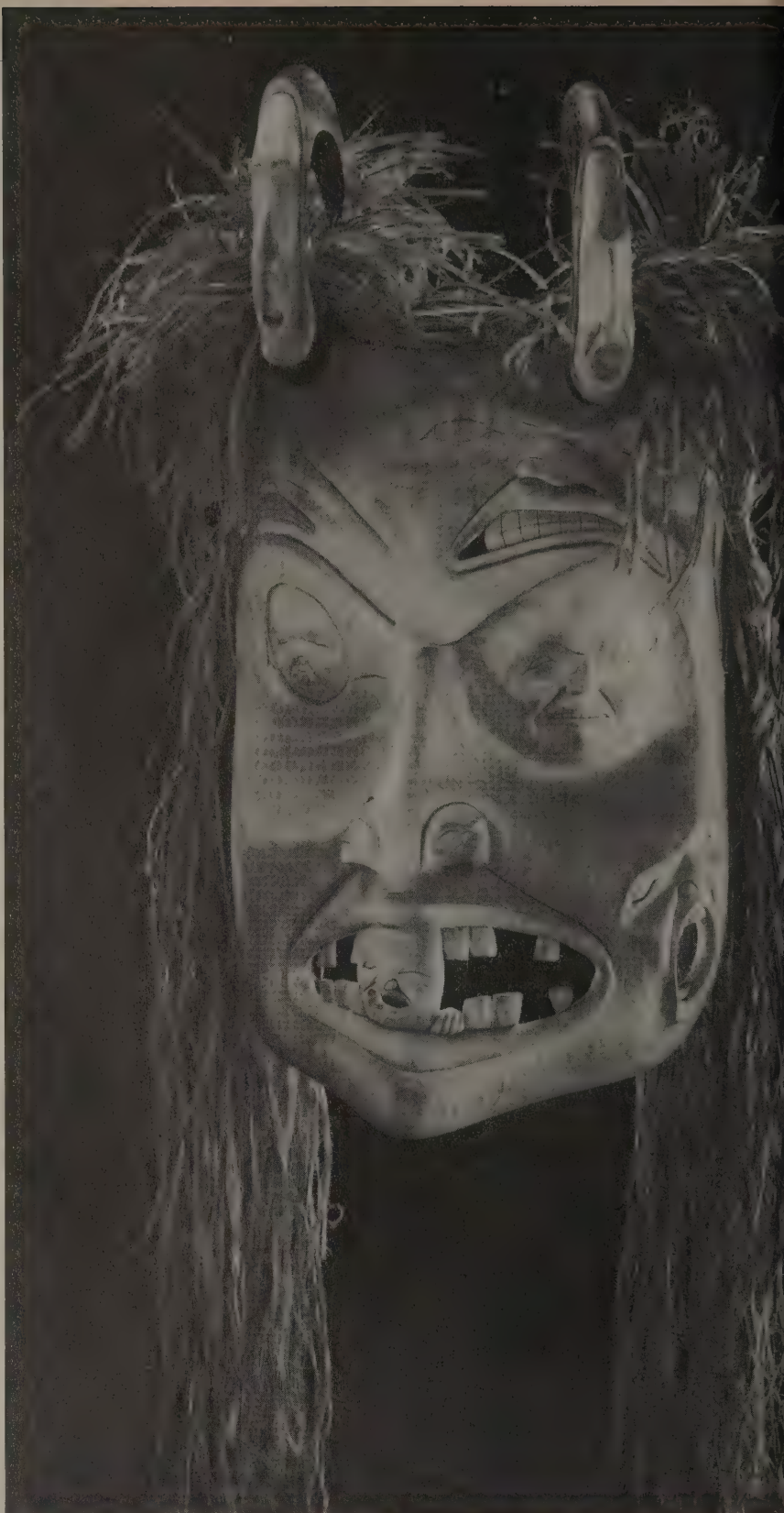
• Around us, kids run in and out, the screen door slams, coffee cups are re-filled, another package of doughnuts appears. Hours pass and finally, one of us will stretch and then we notice the time. Slowly, we get up and attend to other matters. This is when Shúúh starts to leave, shaking hands with everyone and thanking people. He shakes hands with even the littlest kids; they get embarrassed and yet are proud. "Shúúh bil dahdílgod," we'd say. Shúúh is driving away from here. Someday we will talk about how he didn't know that was his name. That man who really liked stories and was always ready to listen to what you had to talk about.

• Before we leave Shiprock, we make one last stop and I buy coffee brewed over an open fire and mutton and green chile wrapped in warm tortillas for all of us. Lori buys a thick slice of Navajo cake — sweet blue corn squares. The girls stay awake until we leave our home country — Dinetah. Then they fall asleep for the next two days of driving. The car hums over smooth roads. "The land of Kansas," I say aloud to no one in particular.



Sáanii Dahataal: The Women Are Singing

(Poems and Stories)
Luci Tapahonso. 1993;
95 pp. ISBN 0-8165-1361-9
\$9.95 (\$11.95 postpaid). University
of Arizona Press, 1230 N. Park Avenue
#102, Tucson, AZ 85719; 602/621-1441



The Keeper of Drowned Souls, Ron Telek. Alder, cedar bark; 24" x 12" x 9" (1990). The Keeper commonly takes the form of an octopus, a shark, or a large whale, to capsize canoes and drag people to the bottom of the ocean, where he can take their spirits.

The faces in the circular eye, the brow and the nostrils are souls in torment. The man in the mouth is being dragged to his death. The grimacing faces are disguises — devoured men used to trick others into the water. The Keeper torments two soulless men by displaying them on his horns.

Spirit Faces

Change the mask and the world changes. The faces are those of story characters, creators, destroyers, warrior women, and animal spirits. When the mask is worn, the wearer is no longer the wearer.

Gary Wyatt, a Northwest Coast gallery curator, assembled this collection of ceremonial masks from the coastal tribes of British Columbia. The faces are carved or painted in the lyric, curvilinear style common to the island rainforest people. The Keeper of the Drowned Souls wears on his own face the tormented faces of those he has drawn into the water. The Hamatsa raven of red cedar, cedar bark, feathers, and paint, has a great hinged beak that opens and closes during the dance.

This is art for ceremony, living double lives like the twenty-three artists who created the masks: they are bound to tradition, building objects for ritual, and tied into the world of galleries where they display their wares. Wyatt explains this exchange as one that has enhanced the diversity of ceremonial art, and enriched the traditions with change.

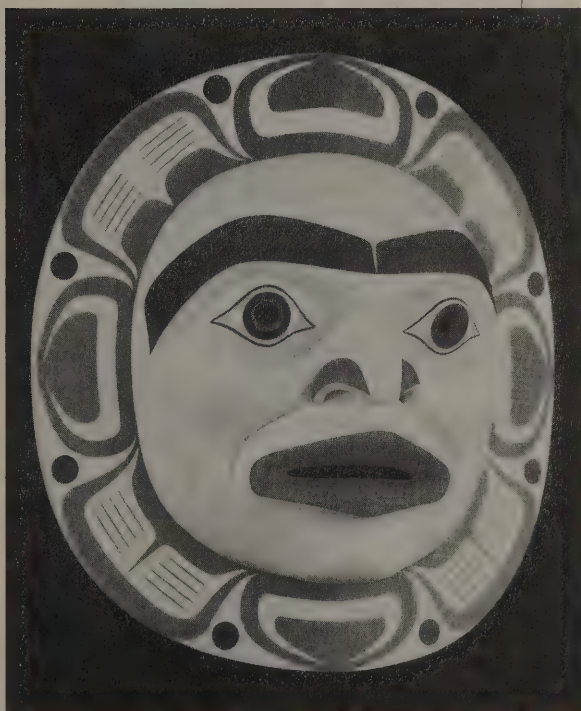
The masks are unqualified spirit. If the artwork has rooted itself into market aesthetics, the tradition it grows from has certainly not divorced itself from the magical and the fantastic. —Craig Childs

Spirit Faces

(Contemporary
Native American Masks
from the Northwest)
Gary Wyatt. 1994; 135 pp.
ISBN 0-8118-0825-4
\$16.95 (\$20.45 postpaid).
Chronicle Books, Order
Dept., 275 5th Street,
San Francisco, CA
94103; 800/722-6657

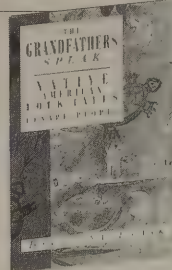


Moon Mask,
Tony Hunt Jr.
Yellow cedar,
paint; 13.5"
x 12.5" x 4"
(1993). The
story of the
moon that is
most often told
is the one about
the Half Moon
and the Full
Moon arguing
to determine
who should be
out overseeing
the ceremony.
They are a form
of fool mask and
mimic each
other's actions
and words.



The Grandfathers Speak

It is difficult to imagine what it would be like if a people's entire body of traditional stories had slowly been forgotten over a period of time, or simply disappeared. This is what Hitakonanu'laxk, a chief of the Lenapé (Delaware) nation, found to be almost true in gathering this liberating and rich collection of folk tales of his people. With a glossary and a brief history of the Lenapé nation, this is an invaluable treasure of Native American literature. —Yolanda Montijo



The Grandfathers Speak

(Native American
Folk Tales of the
Lenapé People)
Hitakonanu'laxk.
1994; 134 pp.
ISBN 1-56656-128-0
\$11.95 (\$14.95 postpaid).
Interlink Publishing
Group, 46 Crosby
Street, Northampton,
MA 01060; 800/238-5465

• We, the eastern Lenapé people, are like a heartbeat in our lands of Lenape'hokink, for we are of this land and we are the land. Each generation is here but for a little while, and while we are alive, it is our responsibility to see that the land remains pure and undefiled, so that our future generations may continue to live here in health and happiness. What we do to the land, to the Earth, we do to ourselves and those of the future generations yet unborn.

• The Little Grandfather

Once there was a hunter who was returning to his village one evening. As he approached the village, he heard a little singing voice. He tried to find where it was coming from and finally found that the voice was coming from a hole in the ground that was not much bigger than that of a chipmunk.

The hunter said, "Hey, you down in the hole! Who are you?" The singing stopped, and the little voice answered, "I am a Grandfather, a Spirit; if you wish to learn more, give me some tobacco."

So the hunter wrapped some tobacco in a leaf, tied it with a blade of grass and dropped it into the hole.

Soon, the little voice spoke again, "Truly, with tobacco you are stingy. Go and tell your people that I will tell a story to anyone who gives me tobacco or a bit of bread. Now listen to this." Then the little Grandfather told the hunter the best story he had ever heard, then he said, "If you wish to hear another story, don't be stingy with your tobacco." Such was the beginning of stories told for pleasure. Now, this story about stories is ended.

Women of the Light

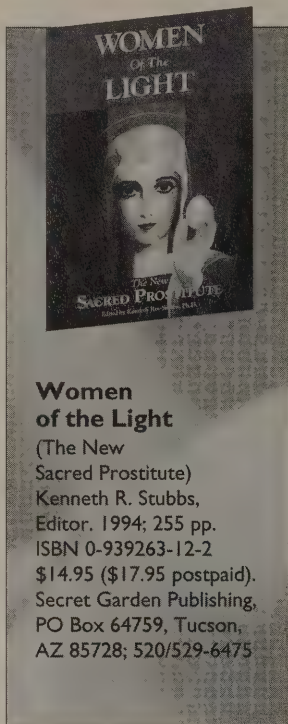
This fascinating and highly readable book makes the convincing case that sex work (that rather euphemistic job category covering everyone from strippers and call girls to sex surrogates and full-service masseuses) can be a source of sexual healing, psychological growth, and spiritual awareness. If this seems like an unlikely proposition, I simply urge you to read **Women of the Light** and think again.

The nine women who tell their stories recount numerous touching incidents (including that of a nurse who risks her career by helping a quadriplegic man to have an orgasm). Entering into temporary intimate encounters, while keeping the full humanity of themselves and their clients intact, these women embody the ancient role of the sacred prostitute, harking back to early Goddess worship, when sex was part of religious observance.

Women of the Light isn't so much a sign of a shocking new trend as it is a clue that the world's oldest profession has long deserved more credit than it has gotten. Sex and spirituality needn't be estranged, these women prove, even in the marketplace. —Jay Kinney

• There are many kinds of hands-on healing. What characterizes my work is I was born with a gift of tender, loving touch and I teach that sacred sexuality is a means to health. I regard the body as the temple of the soul. We must give the body healthy food, exercise, relaxation, and good sex. If we neglect our bodies, we live fragmented lives. To honor the body requires that we honor our sexuality. But there are few safe outlets for exploration in this area. By creating a conscious and sacred space and by establishing emotional and physical boundaries for us both, I offer people the opportunity to explore their sensuality, to be vulnerable, and to be lovingly accepted as sexual beings. As long as the sessions are mutually enjoyable and positively affect both of our lives, we will continue our "erotic dance." Most of my clients see me regularly — for up to eight years.

I have tried other, more socially acceptable professions, but I have always gravitated back into the sexual arena. For years I wondered why I was given this role. I now realize that being a sexual healer/catalyst is a blessing. By guiding



Women of the Light

(The New Sacred Prostitute)
Kenneth R. Stubbs,
Editor. 1994; 255 pp.
ISBN 0-939263-12-2
\$14.95 (\$17.95 postpaid).
Secret Garden Publishing,
PO Box 64759, Tucson,
AZ 85728; 520/529-6475

Thus this question alone was meant to invalidate the whole premise of surrogate-assisted therapy. My answer always was: "I hope they do fall in love." That was a bit facetious, but in all seriousness I did expect that the client and the surrogate would develop closeness, caring, love, and respect for each other! For the client, the relationship with the surrogate may be the first opportunity, ever, to experience what intimacy is all about! And hopefully for both, despite the inevitable difficult aspects, the relationship will have been both enjoyable and rewarding.

• Unlike some of the women who worked for them, neither ever expressed contempt for their clients or any sort of revulsion about the men's sexual desires. This surely contributed to their success as madams, but more than that, I see it as one trait of the sexual priestess who accepts all who come to her. These women oversee what is left of the temples, the ruins that are our legacy from a time when desire could be venerated by religion.

others on their journeys to wholeness by honoring their erotic natures, I am able to maintain my own health and happiness.

• For those who were not familiar with these built-in protections for both client and the surrogate, the most loaded question ever asked was: "What if the client and the surrogate fall in love?" as if falling in love were the worst possible fate. This question was intended to imply that it was likely that the client, being in a vulnerable position, would become overly dependent upon the surrogate and therefore be emotionally damaged.

The Eros of Everyday Life

In a series of organically linked essays, Susan Griffin examines the concept that the "eros of everyday life" is what we in the Western world, feeling ourselves separate from nature rather than a part of it, have lost. This loss is at the root of our confusion and our drive toward self-destruction.

It is an idea in common parlance these days, but Griffin explores it with uncommon thoroughness, and with a penetrating power that comes from both the scholarship and the emotional intensity she brings to the subject. We have rejected certain parts of our psyche, she says, those parts that seem frightening or undesirable. That which is animal-like, sexual, primitive, unruly, fragile — whatever we refuse to see in ourselves we project onto some other group and see it there monstrously magnified. As soon as an idea replaces actual experience, the way is clear for repression or persecution: This is not ourselves we are destroying; it is an other, from which we are separate.

The power of *The Eros of Everyday Life* lies in its lifelike complexity, its refusal to offer simple solutions, its spiraling, branching patterns of thought. —Jeanne DuPrau

■ When the divide between the sacred and the profane falls, everyday life is graced and all that is holy is heavy with vitality. Communion is not only an isolated ritual; it is also a manner of living. One can say that all of life is illusion because it vanishes over time, and that to desire or take pleasure is vain. I climb a tree, I reach for a plum, and eat it, but in moments the plum is gone and I have nothing. The sad conclusion of this way of seeing is that the search for the sacred must go on someplace else. In texts and words which will grow more pale the farther away they are placed from life.

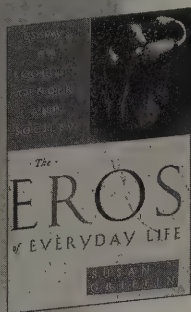
But one can also say that in placing the plum in my mouth I have experienced joy. The fruit of many months of sunlight and earth and water has entered me, becomes me, not only in my stomach, my blood, my cells, but because of what I have learned. The plum has been my lover. And I have known the plum. Letting the plum into the mind of my body, I will always have the taste of sweetness in my memory.

But I cannot know this sweetness, the full dimension of it, unless I am aware of the holiness of this meeting. If I think that the plum tree exists only to feed me, I have lost the meaning that is mixed with every pleasure. The tree exists for the sake of its own being. And it is also part of a commons, its fruit the inheritance of bird and animal and soil alike. I must know this to receive the full value of communion.

Because within every meeting other meetings occur. They take place in the mirror of consciousness. To exist is to reflect and consider. One meets oneself, one sees a trajectory, a certain possible path into what is yet unknown, recalling histories, detecting patterns, weaving the fabric of existence out of every moment. And for each of us, as for every community, village, tribe, nation, the story we tell ourselves is crucial to who we are, who we are becoming.

• Nuclear war has been described as a form of madness. Yet rarely does one take this insight seriously when contemplating the dilemma of war and peace. I wish to describe here the state of mind that has produced nuclear weaponry as a species of socially accepted insanity. This is a state of mind born of that philosophical assumption of our civilization which attempts to divide human consciousness from nature. Exploring the terrain of this state of mind, one will find in this geography, in the subterranean and unseen region that is part of its foundation and history, the hatred of the other in the quite literal forms of misogyny (the hatred of women), racism and anti-Semitism.

... The real enemy is ourselves. The same dualism which imagines matter and energy to be separate also divides human nature, separating what we call our material existence from consciousness. This dualism is difficult to describe without using dualistic language. Actually, the mind cannot be separated from the body.



The Eros of Everyday Life
(Essays on Ecology, Gender and Society)
Susan Griffin.
Doubleday, 1995;
256 pp. ISBN
0-385-47390-7
\$24.95 (\$27.45
postpaid). Bantam,
Doubleday, Dell,
Fulfillment Dept.,
2451 S. Wolf Road,
Des Plaines, IL 60018;
800/323-9872

Sacred Pleasure

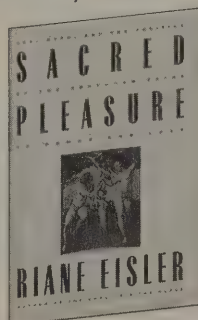
Sexual pleasure is the engine that opens our consciousness to the divine. Eisler's exploration of sacred pleasure takes her to the groves of the Goddess, the jungles of the Pygmy chimpanzee, the drum circles of the men's movement, the ecological activism of the Green Belt movement in Kenya, and the self-help projects of the Honduran Federation of Peasant Women. Her goal: to create a myth so powerful that it will transform our world from a dominator society — based on hierarchy, violence, and subjugation — to a partnership culture which embraces equality, sex and spirituality. In Eisler's feminist future, lustiness will be next to godliness. —Evelyn Pine

• If we look at the whole span of our planetary history, there seems to be in it a trial-and-error thrust toward those traits that in the language of spirituality have been called more evolved — traits powerfully expressed in our human striving toward beauty, truth, justice, and love. And I believe that behind this human striving lies the evolution in our species of two unique, and related, sets of biological equipment: our highly developed mental, emotional, and spiritual capacities for thought, feeling, and what we call higher consciousness, and our highly developed sensual capacities for pleasure from male-female (as well as female-female and male-male) and adult-infant bonding, which together can form the basis for a humane social organization. In short, as I will develop in the course of this book, I believe that contrary to what we have been taught (through, for example, the many stories of how spiritually evolved men have to struggle against their sexuality), human sexuality is not a hindrance but rather a help in the human quest for higher consciousness and more culturally and socially evolved and equitable forms of organization. Indeed, I believe that far from being a "baser instinct" or "lower drive," our human sexuality is part of what we might call a higher drive — an indispensable part of what makes our species human.

• So what I am making a case for is the position that for our ancestors *both* life and pleasure were within the realm of the sacred. In short, I believe that — in sharp contrast to much of later religious imagery and dogma, which often sacralizes suffering and pain — our ancestors sacralized pleasure, particularly that most intense physical pleasure we are given to feel: the pleasure of sexual ecstasy.

Sacred Pleasure

(Sex, Myth, and the Politics of the Body)
Riane Eisler. 1995; 495 pp.
ISBN 0-06-250293-X
\$25 (\$27.75 postpaid).
HarperCollins Publishers,
Direct Mail, PO Box 588,
Scranton, PA 18512;
800/331-3761,
fax 800/822-4090

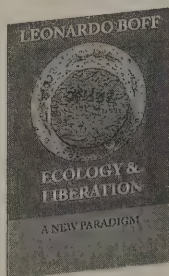


Ecology and Liberation

A leading liberation theologian challenges churches and other religious institutions to lead a revolution in our ways of thinking about the whole of creation. Only a cosmic democracy can reverse our headlong plunge toward annihilation. Leonardo Boff argues cogently that we must replace our present economic system with a democratic socialism; substitute our dog-eat-dog philosophy of human relations with one in which love is the driving force, not hate or greed. Boff follows Francis of Assisi in seeing knowledge, not as a form of appropriation and domination of things, but as a form of love and communion with them. His book opens perspectives and inspires hope. —Gary MacEoin

■ All creatures, from the least to the most complex, form an organic whole. In religious terms we all proceed from the Creator's one and the same act of love. That means that there is a universal brotherhood and sisterhood among all beings. All creatures bear within themselves traces of the divine hand that shaped them, even if evolution was the way in which it happened. This means that creatures are sacramental. They are symbols of a Presence that inhabits the universe.

● The most recent researches in biology and etiology show that the laws that have governed the process of building ecosys-



Ecology & Liberation

(A New Paradigm)

Leonardo Boff. 1993, 1995;
187 pp. ISBN 0-88344-978-1
\$14.95 (\$17.95 postpaid). Orbis Books,
PO Box 502, Maryknoll NY 10545;
800/258-5838, fax 914/941-7005



tems comprise not the struggle for the survival of the fittest (Darwin), but a huge synergetic process based on collaboration and solidarity among creatures (James Lovelock, D. Sagan).

■ Either humankind enters on a vast process of socialization, with an open-ended and therefore cosmic democracy (living together with the stones, the plants, the waters, and the clouds, as brothers and sisters), and thereby preserves the sacred gift of being and life for all, or it runs the risk of a nuclear holocaust. And this time there will be no Noah's ark to save anyone, capitalist or socialist, atheist or believer.

● From an ecological viewpoint everything that exists, co-exists. Everything that co-exists, pre-exists. And everything that co-exists and pre-exists subsists by means of an infinite web of all-inclusive relations. Nothing exists outside relationships. Ecology reaffirms the interdependence of beings, interprets all hierarchies as a matter of function, and repudiates the so-called right of the strongest. All creatures manifest and possess their own relative autonomy; nothing is superfluous or marginal.

The New Politics of Survival

Massive US intervention with military, economic, and psychological weapons has long thwarted the struggle of the peoples of Central America to end centuries of exploitation. The hundreds of thousands of violent deaths in recent years have not, however, been fruitless. Formerly silent and submissive people have acquired a militancy, and an awareness of the power that comes from organization. The entrenched oligarchies have been greatly weakened, and the military cliques' survival is tenuous.

The new era is one of few spectacular breakthroughs, just small patient steps by anonymous people in obscure villages and slums. This grassroots popular movement gives hope for a better tomorrow. —Gary MacEoin

● U.S. military and economic intervention in Central America helped set the agenda for the 1970s and 1980s of a narrow band of large landowners and army officers. *The New Politics of Survival: Grassroots Movements in Central America* addresses the issues

The Frontiers of Catholicism

Power, defined as the ability to enforce one's will, is for Gene Burns the most important variable affecting the dynamics of Catholic ideologies. The theme of his book is the impact of historical developments since the mid-nineteenth century on the distribution of that power. The Second Vatican Council (1962-1965) emerges as the major catalyst of change, its impact being particularly striking for religious sisters, especially in the United States.

For priests, the Council's stress on collegial decisionmaking was ambiguous. While it meant that the bishop had to share power with them, it also meant that the priests had to share power with the laity. The previously powerless sisters had no reservations. All they had to lose were their habits.

Missionary outreach of US religious women to Latin America also helped. The women proved highly receptive to the liberation theology that had developed there in the late 1960s. That theology's insistence that the oppressed had to assume responsibility for their own lives helped to provide the sisters with a rationale in their struggle to free themselves. —Gary MacEoin

raised by the export of arms, military advisors, and capital but goes beyond an indictment of military solutions and unjust economic distribution to consider alternative ways of organizing society. Despite the economic backwardness of the region, Central American countries are forging new democratic processes that could be a model for the hemisphere.

The incidents of daily resistance (both armed and unarmed) may well be "short-lived, localized, ephemeral and easily repressed," as one analyst has described popular organizations. But taken collectively they have made for a social change movement that has altered the political terrain of Central America in a fundamental way. The account of the popular movement in Central America is a story of conscientization of the poor and of a practice of "a politics of the possible" — local actions and demands set in a specific circumstance, but with a vision of fundamental change.

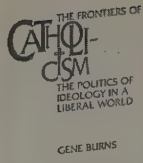
The struggle has shifted from the military battlefield to the political arena where the forces of civil society compete to assert their interests. Currently within civil so-

The Frontiers of Catholicism

(The Politics of Ideology in a Liberal World)
Gene Burns. University of California Press, 1992; 304 pp. ISBN 0-520-08922-7 \$15.95 (\$18.95 postpaid). California/Princeton Fulfillment Services, 1445 Lower Ferry Road, Ewing, NJ 08618; 800/777-4726

By the late 1960s many (and probably the large majority of) American sisters had rejected a power structure based on patriarchal hierarchy and a view of religious life as isolated from the secular world. . . . The revised bylaws [of the Conference of Major Superiors of Women] dropped all suggestions of deference to Rome; by 1970 the dominant tendency in CMSW was a strong feeling that the days when men dictated a mandatory set of requirements for women's religious life were over. The conference had absorbed the antihierarchical view of the vow of obedience as an openness to God through dialogue, rather than subservience to the hierarchy. As the LCWR

ciety nowhere are the goals of social justice, political participation and economic democracy more clearly articulated than in the popular organizations. Campesinos, widows, Christian base community members, returned refugees and others do not pursue justice or political participation out of an idealistic or ideological commitment. Rather they form their organizations in order to defend themselves and to assert their rights in the face of a desperate struggle for survival.



president put it in 1972, "Obedience can no longer be used to excuse ourselves from thinking, from studying our own situation, and from dialogue." The organization also renamed itself the Leadership Conference of Women Religious, the argument being that the term *superior* (the "S" in CMSW) was antiquated and did not suit American conceptions of democracy and participation.

Without an appropriate sociological and historical perspective, we can misunderstand the context of current ideological and political change within the Catholic Church. First, we might not realize that even a century ago (and perhaps especially a century ago), it was not true that concerns with spirituality and papal supremacy were divorced from concerns with temporal politics. Second, we might not see that many of the perspectives now labeled as alien to Catholicism continue to be framed within peculiarly Catholic worldviews.

The New Politics of Survival

(Grassroots Movements in Central America)
Minor Sinclair, Editor. 1995; 301 pp. ISBN 0-85345-9451-7 \$15 (\$18 postpaid). Monthly Review Press, 122 W. 27th Street, New York, NY 10001; 212/691-2555



In Trouble Again • Into the Heart of Borneo

Redmond O'Hanlon, a British naturalist, is so addicted to the joys of exotic flora and fauna that he has risked life and limb journeying to the last untouched places on the earth. In these books he blunders through the jungle like a benign, chubby Mr. Magoo, gleefully recounting tales of colorful flowers, resplendent birds, piranhas, crocodiles, bird-eating spiders, giant leeches, poisonous darts, and headhunters. In writing that combines the Marx Brothers, Darwin, and *The Heart of Darkness*, O'Hanlon dryly observes the delights, horrors, and absurdities indigenous to the jungle. —Wade Fox

In the Amazons, on the other hand, should you have too much to drink, say, and inadvertently urinate as you swim, any homeless candiru, attracted by the smell, will take you for a big fish and swim excitedly up your stream of uric acid, enter your urethra like a worm into its burrow and, raising its gill-covers, stick out a set of retrorse spines. Nothing can be done. The pain, apparently, is spectacular. You must get to a hospital before your bladder bursts; you must ask a surgeon to cut off your penis.

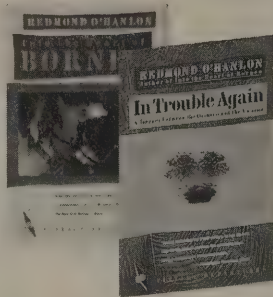
In consultation with my friend at the Radcliffe Hospital in Oxford, Donald Hopkins, the inventor of the haemorrhoid gun, I designed an anti-candiru device: we took a cricket-box, cut out the front panel, and replaced it with a tea-strainer. —*In Trouble Again*

Dusk came suddenly, and equally suddenly, Eared nightjars appeared, hawking insects, stooping and turning in their haphazard, bat-like way, along the tops of the trees above the river banks, seeming half-transparent and weightless in their ghostly agility, like falcons weirdly deprived of their power and strike and push. And they were whistling to each other.

After about ten minutes, they vanished. Which was just as well, because it had dawned on me that the fish and rice in my mess-tin would need all the attention I could give it. The sebarau was tasteless, which did not matter, and full of bones, which did. It was like a hair-brush caked in lard. James had made the same discovery.

"Redmond, don't worry," he whispered, "if you need a tracheotomy I have a biro-tube in my baggage."

—*Into the Heart of Borneo*



In Trouble Again

Redmond O'Hanlon.
Vintage Books, 1990; 288 pp.
ISBN 0-679-72714-0
\$12 (\$16 postpaid).

Into the Heart of Borneo

Redmond O'Hanlon.
Vintage Books, 1987;
204 pp. ISBN 0-394-75540-5
\$11 (\$15 postpaid). Both from:
Random House, Order Dept., 400
Hahn Road, Westminster, MD
21157; 800/733-3000

Incidents of Travel in Yucatan

This republication of the first widely distributed European account of the Yucatan holds surprising relevance for folklorists, archaeologists, and readers interested in the current political conditions in Chiapas. John Stevens and F. Catherwood sojourned there in 1841, visiting haciendas, missions, and ruins. Catherwood's engravings provide excellent documentation of Yucatan before the tourists.

*I was fascinated by the striking contrast between Stevens' description of the majestic ruins and his attitude toward the native population. While Stevens marvels at the accomplishments of the Mayans, he blandly accepts their descendants' enslavement in the haciendas. The tragic potency of *Incidents of Travel in Yucatan* lies in this respect for a civilization and concurrent disregard for its people.* —Andrew Needham

Over the cavity left in the mortar by the removal of the stone were two conspicuous marks, which afterward stared us in the face in all the ruined buildings of the country. They were the prints of a red hand with the thumb and fingers extended, not drawn or painted, but stamped by the living hand, the pressure of the palm upon the stone. He who made it had stood before it alive as we did, and pressed his hand, moistened with red paint, hard against the

Savages

The Huaorani consider themselves the bravest people in the rainforest. Beyond the dangers of the jungle they are fighting to retain their culture in the face of encroaching development, missionaries, and pollution of their land by oil drilling. In *Savages* we follow the Huaorani as they stand up to one of the biggest oil corporations, working to bring their story to the awareness of the world. It is an endeavor that takes them from the rainforests of Ecuador to the capital of the United States.

Joe Kane not only chronicles the plight of a people, he introduces us to individuals — and through them, a better understanding of the Huaorani life and culture. —Kathleen O'Neill

Entering the Huaorani territory simply as a friend of the Huaorani, however, was virtually impossible. Nominally, this was because none of the Huaorani had been licensed as a guide. Few of them could read Spanish well enough to pass the required course, and the licensing fee was far more than even the most ambitious Huao could earn in a year of hard labor. But the real reason the Huaorani could not bring outsiders into their territory was political. The military controls most of the oil-producing land, and it looks harshly on foreigners. As the captain working the command post

stone. The seams and creases of the palm were clear and distinct in the impression. There was something lifelike about it that waked exciting thoughts, and almost presented the images of the departed inhabitants hovering about the building. And there was one striking feature about these hands; they were exceedingly small. Either of our own spread over and completely hid them; and this was interesting from the fact that we had ourselves remarked and heard remarked by others, the smallness of the hands and feet as a striking feature in the physical conformation of the Indians at the present day.

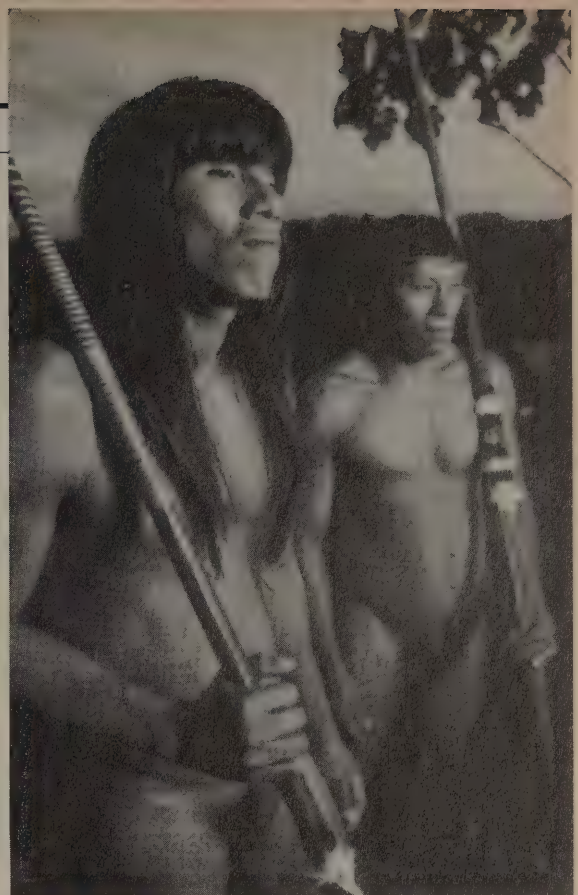
Early in the morning we were roused by loud bursts of music in the church. The cura was giving them the benefit of his accidental visit by an early mass. After this we heard music of a different kind. It was the lash on the back of an Indian. Looking down the corridor, we saw the poor fellow on his knees on the pavement, with his arms clasped about the legs of another Indian, so as to present his back fair to the lash. At every blow he rose on one knee, and sent forth a piercing cry. He seemed struggling to restrain it, but it burst from him in spite of all his efforts. His whole bearing showed the subdued character of the present Indians, and thankfulness for

explained to me, darkly: "They bring a mountain of bad ideas." "Outside influences" were blamed whenever the Huaorani, or any other of the Oriente's Indian groups, began to agitate against oil development, and what few human-rights workers there were in the Oriente were often threatened and sometimes jailed.

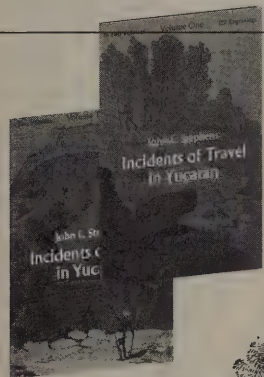
According to a study that had been commissioned by Conoco, the most devastating potential impact of developing Block Sixteen would be colonization of the Maxus road. Ecuador had the greatest population density in South America and its highest rate of population growth, and the pressure to colonize every inch of land was enormous. The report had warned Conoco that for the Huaorani "to lose any more land or resources will result in deculturalization and genocide." But nowhere in the entire Amazon, let alone Ecuador, had anyone ever been able to prevent the colonization of a road — except by not building one. Maxus could have developed Block Sixteen with helicopters, but that would

have cut into profits. Instead, Maxus proposed a system of guards and gates. In the end, Jiménez said, "I really believe that when the colonists understand the road is on Indian land, when they understand that land belongs to other people, they will respect that."

In the afternoon Moi put on his shirt and tie and crown and quivers and went with the SCLDF lawyers to testify before the commission. I went, too, and saw for a fact that he had taken to heart my suggestion "to use your own words": The hearing was in Spanish, and when it came time to testify Moi roared like a jaguar. However, he did so in Huaorani. The commissioners sat back, stunned. By the time Moi reached his warning that the Huaorani were "the bravest people in the Amazon" and would defend themselves "with spears from all sides," he was half out of his seat with the intensity of his oratory. About then Karen Parker leaned over and said, very quietly, "Now



Huaorani warriors; Moi is on left.



Incidents of Travel in Yucatan

John L. Stephens. Illustrated by Frederick Catherwood. 1843, reprinted 1963; Vol. 1, 303 pp. ISBN 0-486-20926-1, \$7.95; Vol. 2, 336 pp. ISBN 0-486-20927-X, \$6.95. Add \$3 postage per order. Dover Publications, Order Dept., 31 E. 2nd Street, Mineola, NY 11501; 516/294-7000

not getting more. Without uttering a word, he crept to the major domo, took his hand, kissed it, and walked away. No sense of degradation crossed his mind. Indeed, so humbled is this once fierce people, that they have a proverb of their own, "Los Indios no oigan si no por las nalgas" — "The Indians cannot hear except through their back."

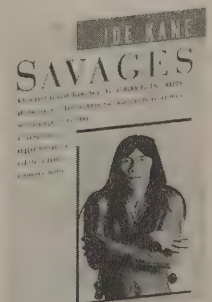


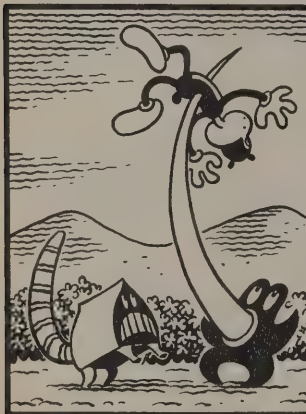
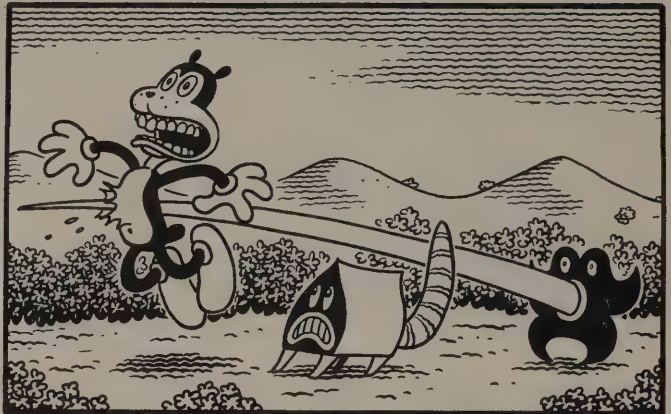
say it in Spanish." Moi switched languages without appearing to miss a beat, and finished with a plea: "Please do not abandon us to the Company."

When the hearing ended, a half dozen commission members gathered around Moi to introduce themselves. As it happened, Moi had brought several string bags with him from the forest. The bags had been woven by Huaorani elders, who depend upon such handicrafts to earn a little cash for such things like shotgun shells and malaria medicine. He hoped to fetch about five dollars for each bag, and a dollar more for "transport." As Moi figured it, there was no better place to start his sales campaign than with the commission. But the Huaorani are warriors, not traders, merciless to their enemies and generous to their friends. Within five minutes he had given away all the bags he'd brought. He gave away a spear, too, to the commission's executive secretary. "When your sky falls," Moi said, "this will hold up the clouds."

Savages

Joe Kane. Alfred A. Knopf Inc., 1995; 273 pp. ISBN 0-679-41191-7 \$25 (\$29 postpaid). Random House, Order Dept., 400 Hahn Road, Westminster, MD 21157; 800/733-3000





JIM WOODRING

Hypersea

"Hypersea" is the authors' term for the active fluid that circulates within and between multicellular land organisms and maintains itself through their essential interconnectedness. The main theme of this thought-provoking book is that while ocean life is bathed in many of the necessary nutrients, land life is more dependent on getting water and nutrient elements from the bodies of other organisms. Hence there is an increased emphasis on interaction, whether predation, parasitism, or mutualistic symbiosis.

The authors maintain that life had to occupy the land as an integrated system, not just as isolated pioneering species. In support of this they present some fascinating fossil evidence of symbiosis between some of the earliest known land plants and fungi and algae living within their tissues. From the early role of lichens as digesters of rock, to the widespread intimacy (called mycorrhiza) of fungal filaments and plant roots, to mutual interdependencies of fungi and insects, the McMenamins describe the intercommunicating networks of fungi as essential to complex life's tenure of the earth's land surface. Using the intricate life strategies of parasites and hyperparasites (which prey on other parasites), they show us the hypersea world within living creatures as elaborate ecosystems almost unknown to the biological nonspecialist.

This book is a significant advance in holistic biological thinking. It gives us a new view of the biosphere, in which symbiosis and cooperation are as important as predation and competition.

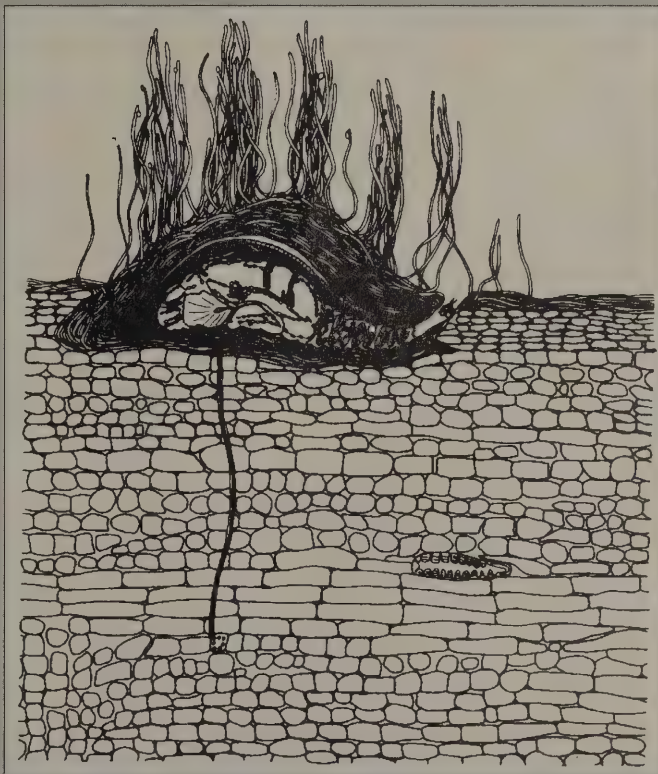
—Sterling Bunnell

Arthropods and arthropodlike animals not only serve as refugia or evolutionary loci for smaller organisms; these creatures also become beneficiaries of the hypermarine diversity-enhancing effect. This gives us reason to believe that Hypersea is a new and general scientific principle. That is, Hypersea is a previously unrecognized biogeophysical entity — the body fluids of eukaryotic organisms and the inhabitants of those fluids — that allows and encourages a tremendous amount of diversity of organisms by creating untold numbers of isolated living environments.

Like a string of kettle lakes connected by streams only during times of flood, the bodies of land animals are lakes within the Hypersea hydrosystem — connected by the fluids they exchange during moments of contact.

Septobasidium is a gelatinous fungus found on tree bark. It acts as a link in a Hypersea current that flows through a scale insect as well as the tree. . . .

Septobasidium forms a dense, flat mycelial growth on a tree branch. The mycelial mat possesses chambers, channels, and tunnels which harbor a colony of scale insects. Some of the adult insects are penetrated by *Septobasidium* hyphae, which branch into complex haustoria inside the scale insect. The "lichenized" insects are paralyzed but not killed, and they are able to give birth to numerous progeny. In effect, the insects are turned into living pumps; they continue to feed on the sap of the tree branch even as nutrients and water are passed through their own bodies to the invading fungus.



Septobasidium's insect "house" shown in cutaway view. The scale insect has given birth to one of its free-living young, which is crawling out through an opening or door in the house. The scale insect's suctorial tube can be seen reaching into the tissues of the plant where it taps into phloem.

Hypersea

(Life on Land)

Mark A. McMenamin

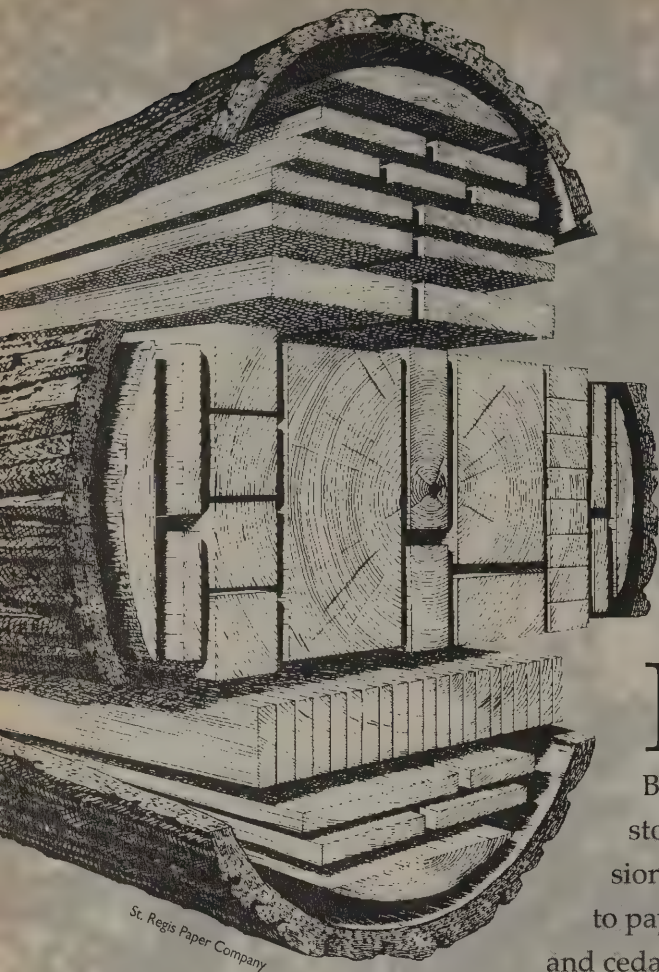
& Dianna L. McMenamin.

1994; 343 pp. ISBN 0-231-07530-8

\$27.95 (\$30.95 postpaid). Columbia University Press, Order Dept., 136 S. Broadway, Irvington, NY 10533; 800/944-8648

Why do we think the insects are not just used by the fungus? What leads us to think that the association is mutualistic?

Consider: the haustoria-invaded insects have been found to live longer than their still-mobile relatives. In fact, the invaded insects become pillars of their society, so to speak, since they nourish the fungal home on which the welfare of the insect colony depends.



Cutting From the Heart

BY KEVIN MAHER

I AM A CONSUMER OF THE OLD-GROWTH British Columbia forests. I build wooden boats, restore antique wooden airplanes, and build the occasional piece of furniture for loved ones or those willing to pay a hefty price. The few truckloads of spruce, fir, and cedar planks that I use each year must be nearly flawless: wood that's found only in the slow-growing coastal rain forests of British Columbia. This wood has always been expensive, but in the last several years it has become very difficult to obtain. After several months of searching in vain for Sitka spruce to make aircraft wing spars from, I decided to buy a log and have it custom-milled. In addition to ensuring my supply of this light and supple wood for years to come, the experience forced my latent environmentalism out of its closet and onto center stage.

A quick call to the local timber barons produced a bittersweet answer. Yes, they cut the sort of spruce I needed at one of their mills, and they would be pleased to sell me cants, but the minimum order was ten thousand dollars. (A cant is a section of a log, usually six inches square.) I only needed about three thousand dollars worth, and even that would require stealing the mortgage money. Pleas of being a small business and providing employment for several BC residents fell on deaf ears. A couple of wholesalers would sell me what I needed, but the marked-up price made me wonder why I was trying to make a living working with the stuff when a king's ransom could be made by just buying and selling it.

Enter (into the comic strip of my life) Glen Putman. Glen owns a one-man custom sawmilling operation on the banks of the Fraser River near Haney, BC. He started out as a logger; then he was a deckhand on a tugboat, and then a timber framer. When he could no longer readily find good timbers, he started the mill to supply boatbuilders and custom timber framers. Almost all of his millwork is cedar, but he gets the occasional missorted spruce log in his boom. It was one of these logs that caused us to meet on a foggy January morning.

Driving my old truck into his muddy yard, I passed a sign: "Dear Thieves — The RCMP Do Not Patrol This Area. All Thieves Will Be Killed After A Warning Shot In The Kneecaps." The man who came out to greet me was small-framed, with short graying blond hair and beard, intense gray-blue eyes, and thankfully, not carrying a gun.

I extended my hand. "Glen Putman? I'm Kevin Maher. I called you about some spruce yesterday." I always try to start out on the right foot, especially with gun owners.

"Oh yeah, you're the young fella buildin' airplane wings. Let's pull the log up and see what we've got." He walked out onto the dock, secured a choker sling around a large slimy log, and winched it up a set of metal rollers onto the mill deck. After studying it carefully for several minutes, he positioned it between the steel tracks that the saw ran along and spiked it securely in position. A giant electric motor hummed and the immense bandsaw shuddered into life. Glen cranked a Rube Goldberg arrangement of wheels and bicycle chains, and the saw slowly worked its way along the log, neatly splitting it in half.

After turning off the saw, we picked up cant hooks and rolled each loose half-log to one side. What I saw exposed in the fresh cut took my breath away. Beautiful straight-grained wood with closely spaced annual rings, hardly any pitch pockets, and not a knot to be seen. At that moment, I didn't feel that I had slaughtered a tree so much as that I had assisted in the birth of some rare and beautiful lumber. Lumber I would soon handcraft into graceful wooden boats and gravity-defying aircraft wings.

"That's perfect, Glen, I'll take it all." As an afterthought I added rhetorically, "I don't know why we cut this sort of wood so indiscriminately, it will be a shame when it's gone."

"Simpleminded greed," he replied. "The environmentalists don't want us to cut down anything, and the big forest companies cut and run. Both sides lie through their teeth. Take this log, for instance. I counted the rings and it's just over two hundred years old. Now first off, half of the good timber has already been cut. Of the remaining half, one quarter is now parkland. [Thirteen percent of the original.] Now of what's left, they're going to cut 1 percent per year. That means in a hundred years it's all gone, and we'll have to wait another hundred years for a log like this. And that's all assumin' that their reforestation works, which it often don't. The road-building on steep slopes causes soil erosion, and then nothin' grows back." (I later checked Glen's figures; they were correct.)

"Well," I sighed, "I guess we need the jobs over on the Island."

"Jobs my ass," he snorted as he oriented the log on the mill deck, positioning the growth rings perpendicular to the saw blade. "The logging companies go into the forests with heavy mechanized equipment and take out huge amounts of timber quickly. Smaller outfits like horse logging, heli-logging, or beach logging would employ more people, and most of the time you couldn't even tell that an area had been selectively logged off." Glen started the saw and began cutting a quarter of the log into two-inch-thick boards. Every once in a while, he would stop and angle the log slightly so as to miss a small knot or bark pocket. The Japanese word *jushin* came to mind — that translates to "cutting from the heart." As Glen cut, I piled the heavy boards off to one side, scarcely able to believe my good fortune.

When we had worked through the first quarter, we wrestled the second onto the mill deck. "Same thing with their mill operations, Kevin. These logs are worth anywhere from two thousand to twenty thousand dollars each. Now it seems to me that it isn't unreasonable for a man to spend a day sawing one up if that's what it takes. That way you can minimize waste and maximize lumber quality.



Kevin Maher is an airplane pilot, boat builder, and antique airplane restorer residing in Vancouver, British Columbia. His spruce seedlings are growing in a coastal clearcut.

The South American mills use about half a log, our mills use maybe 70 percent, but in Europe they're better than 90 percent. The local mills just run the logs through a giant bread slicer as fast as possible. That's why there is such junk wood in the lumberyards. The really good wood they just cut into cants and load onto container ships. We just ship the jobs right out the country. If you had lots of small mills like me you'd have more jobs, better lumber, and less waste. By maximizing the number of logs that go through a mill each hour all you do is maximize the profits, but even then they leave the country in the form of share dividends."

"But why export raw cants, Glen?"

"Simple. The Asian markets pay good money for them, they're easy to produce, and we have to maintain the balance of trade so that we can all drive new Toyotas." It occurred to me that Glen Putnam would make a good forest minister. Better than the current one, at any rate.

"And another thing," Glen continued as he pulled his toque up over his ears. "Why can't I get a small tree farm license, say four or five hundred acres, and selectively log it for what I need? Did you know that the big forest companies pay a little over a billion dollars a year in stumpage fees and taxes, but the Ministry of Forests costs \$800 million a year to run? We are almost giving the timber away, and yet I'm almost going under buying logs from brokers." I later checked on this too; Glen was right — including almost going broke. While looking for a tape

measure, I noticed all manner of overdue bills tacked to the back of his toolshed door. Why does someone so insightful and hardworking go broke while the Armani-suited wheelers and dealers on Howe Street become millionaires?

SEVERAL HOURS LATER, just as the sun broke through the chilly fog, we were lifting the wet planks onto my trunk, keeping tally as we went. "Thanks again, Glen. What do I owe you?"

"Comes to nineteen hundred and twenty-five dollars if that's okay with you," he replied softly.

I peeled twenty crisp hundred-dollar bills from my wallet, shook hands with that remarkable man, and backed out of his yard with my precious cargo. As I drove away, I felt a mixture of anger at the past mismanagement of our forests and fear for their future. The quote, "You're either part of the solution or part of the problem," never seemed so close to home. I resolved not to be merely an idle bystander anymore.

Back home, I joined WARP — the Woodworkers' Alliance for Rainforest Protection. Then I bought a package of Sitka spruce seeds and started a dozen seedlings in my kitchen. Tomorrow, if it isn't raining, I will drive out to a coastal clearcut and carefully plant them. In several hundred years, maybe somebody will know the pleasure of building boats from my trees. It seems only fair that you should put back what you take. ♻️

Grassroots Groups

British Columbia

Friends of Clayoquot Sound:
Box 489, Tofino, BC V0R 2Z0;
604/725-4218, fax 604/725-2527.

Friends of the Watersheds:
3096A Paisley Rd., N. Vancouver,
BC V7R 1C9; 604/986-9773.

**Alberni Environmental
Coalition:** Box 1087, Port
Alberni, BC V9Y 7L9; phone/fax
604/723-4666.

**Cariboo Mountains Wilderness
Coalition:** Box 47008, Denman
Place Postal Outlet, Vancouver,
BC V6G 3E7; 604/685-8269,
fax 604/681-8999.

Carmanah Forestry Society:
1431 Richardson, Victoria, BC
V8S 1R1; 604/381-1141,
fax 604/389-1848.

**East Kootenay Environmental
Society:** Box 8, Kimberley, BC
V1A 2Y5; phone/fax
604/427-2535.

Friends of Cortes Island: Box
3333, Manson's Landing, BC V0P
1K0; phone/fax 604/935-6992,
email foci@web.apc.org.

**Galiano Conservancy
Association:** RRI, Porlier Pass
Rd., Galiano Island, BC V0N 1P0,
phone/fax 604/539-2424.

Islands Alliance: c/o Susan Yates,
Gabriola Island, BC V0R 1X0;
phone/fax 604/247-8086.

**Kyuquot Economic &
Environmental Protection
Society:** General Delivery,
Kyoquot, BC V0P 1J0;
604/332-5293.

**Quesnel Environmental
Society:** Box 4188, Quesnel,
BC V2J 3J3; 604/992-8742.

**Slocan Valley Watershed
Alliance:** Box 139, Winlaw,
BC V0G 2J0; 604/226-7770,
fax 604/226-7446.

**Vancouver Temperate
Rainforest Action Coalition:**
Box 124, 1472 Commercial Dr.,
Vancouver, BC V5L 3X9;
604/251-3190, fax 604/254-9980.

**Vulnerable Ecologies
Protection Society:**
706 Warder Pl., Victoria,
BC V9A 7H6;
604/360-1541, email
jwright@islandnet.com.

US Pacific Northwest

**Mattole
Restoration
Council:** PO Box
160, Petrolia, CA
95558.

**Environmental
Protection
Information
Center (EPIC):**
PO Box 397,
Garberville,
CA 95440;
707/923-2931.

Citizens for Better Forestry:
PO Box 1510, Hayfork, CA 96041.

Klamath Forest Alliance:
PO Box 820, Etna, CA 96027;
916/467-5405.

Headwaters: Publishers of the
excellent *Headwaters Journal*, \$20/
year. PO Box 729, Ashland, OR
97520; 503/482-4459,
fax 503/482-7282.

**Woodworkers Alliance
for Rainforest Protection
(WARP):** PO Box 133,
Coos Bay, OR 97420.

**Applegate New Forestry
Advocates:** 6285 Thompson Ck.,
Applegate, OR 97530.

**Citizens for Responsible
Logging:** PO Box 21, Chewelah,
WA 99109.

**Whidbey Environmental Action
Network:** PO Box 53, Langley,
WA 98260; 206/221-2332.

**Blue Mountains Natural Forest
Alliance:** Rt 4 Box 640, Walla
Walla, WA 99362.

Tonasket Forest Watch: PO
Box 313, Tonasket, WA 98855.

**Quilcene Ancient Forest
Coalition:** 90 Magnolia Ave.,
Port Townsend, WA 98368;
206/385-6271.

**Southeast Alaska Conservation
Council:** Box 021692, Juneau, AK
99802; 907/586-6942

Tongass Conservation Society:
PO Box 3377, Ketchikan,
AK 99901.

Recommended Reading

These three books will take you far beyond the list on this page, from a global scale to your own backyard.

Restoration Forestry (An International Guide to Sustainable Forestry Practices Worldwide); Michael Pilarski, Editor. 1994; 528 pp. \$26.95 (\$30.45 postpaid). Kivaki Press, 585 E. 31st, Durango, CO 81301; 800/578-5904. Outstanding sourcebook on sustainable forestry. Access to hundreds of organizations worldwide.

Community Guide to the Forest (Ecology, Planning and Use): Susan Hammond & Herb Hammond. 1992; \$50 postpaid. Slocan Valley Watershed Alliance, Box 139, Winlaw, BC Canada V0G 2J0; 604/226-7770, fax 604/226-7446. Michael Pilarski (above) considers this a complement to his book, particularly in the areas of ecology and forest management.

BC Environmental Network Directory: 1995; 200 pp. \$33 postpaid (check only). BCEN, 1672 E. 10th Ave., Vancouver, BC Canada V5N 1X5; 604/879-2279, fax 604/879-2272, email bccen@web.apc.org. Access to over 400 BC environmental NGOs.

Certification Agencies

Certification programs for sustainably produced wood products:

**Institute for Sustainable
Forestry:** PO Box 1580,
Redway, CA 95560;
707/923-4719,
fax 707/923-4527.

Silva Forest Foundation:
PO Box 9, Slocan Park,
BC V0G 2E0;
604/266-7222,
fax 604/226-7446.

**Ecoforestry Institute
Society:** Box 5783, Stn. B,
Victoria, BC V8R 6S8;
604/388-5459,
email dpatter@web.apc.org.

**Rogue Institute for
Ecology and Economy:**
Box 3213, Ashland, OR
97520; 503/482-6031.

Regional Groups

**British Columbia
Clayoquot Rainforest Coalition
International Coalition to Save**

British Columbia's Forests:
Contact both of the above c/o
Rainforest Action Network,
450 Sansome St., Suite 700,
San Francisco, CA 94111;
415/398-4404, fax 415/398-2732,
email rainforest@igc.apc.org,
URL <http://www.ran.org/ran/>.

**Western Canada Wilderness
Committee:** 20 Water St.,
Vancouver, BC V6B 1A4;
604/683-8220, fax 604/683-8229,
email wc2wild@web.apc.org,
URL <http://www.web.apc.org/wcwild/welcome.html>.

BC Environmental Network:
1672 E. 10th Ave., Vancouver,
BC V5N 1X5; 604/879-2279,
fax 604/879-2272, email
bccen@web.apc.org.

Valhalla Wilderness Society:
Box 224, New Denver, BC
V0G 1S0; 604/358-2333,
fax 604/358-7950.

Greater Ecosystem Alliance:
Box 957, Nelson, BC V1L 6A5;
phone/fax 604/355-2327,
email gea@igc.apc.org.

Native Forest Network:
c/o Comox Valley Environment
Resource Centre, 463 5th St.,
Courtenay, BC V9N 1K5,
604/897-1711, fax 604/338-4409.

Forest Action Network:
Box 155 - 1895 Commercial
Drive, Vancouver, BC V5N 4A6;
604/251-2477.

**Intertribal Forestry Assn. of
BC:** #201 - 515 Highway 97,
South Kelowna, BC V1Z 3J2.

Save the Cedar League: General
Delivery, Crescent Spur, BC V0J
3E0; phone/fax 604/553-2325.

**U.S. Pacific Northwest
Cascade Holistic Economic
Consultants (CHEC):** 14417 SE
Laurie, Oak Grove, OR 97267;
503/652-7049.

**Northwest Coalition for
Alternatives to Pesticides
(NCAP):** PO Box 1393, Eugene,
OR 97440; 503/344-5044.

**Forest Land Management
Committee:** 8400 Rocky Lane
SE, Olympia, WA 98513;
206/459-0946

Ecoforestry Institute: PO Box
12543, Portland, OR 97212;
phone/fax 503/231-0576

Forest Action Workshop:
PO Box 1444, Cave Junction,
OR 97523; 503/592-3083.

Greater Ecosystem Alliance:
PO Box 2813, Bellingham, WA
98227; 206/671-9950, fax 206/
671-8429, email gea@igc.apc.org.

**California Ancient Forest
Alliance:** PO Box 1749, Quincy,
CA 95971; 906/283-1007, fax
916/283-4999.

**Native Forest Action
Council:** PO Box 2171, Eugene, OR 97402;
503/249-2958.

**Washington Wilderness
Coalition:** PO Box 45187,
Seattle, WA 98145; 206/633-1992,
fax 206/633-1996.

Intertribal Timber Council:
4370 NE Halsey St., Portland,
OR 97213; 503/282-4296, fax
503/282-1274.

**Inland Empire Public Lands
Council:** PO Box 2174, Spokane,
WA 99210.

**Northwest Environment
Watch:** 1402 3rd Ave., Suite
1127, Seattle, WA 98101-2118;
206/447-1880, 206/447-2270,
email nwwatch@igc.apc.org.

National Groups

Canada

Ecotrust Canada: 2211 W. 4th Ave.,
Suite 219, Vancouver, BC V6U 4F2;
604/732-8486, fax 604/732-0752.

Greenpeace Canada: 1726 Commercial
Drive, Vancouver, BC V5N 4A3;
604/253-7701, fax 604/253-0114.

Canadian Environmental Network:
PO Box 1289, Stn. B, Ottawa, ON K1P
5R3; 613/563-2078, fax 613/563-7236,
email cen@web.apc.org.

Sierra Legal Defense Fund: 207 West
Hastings, Suite 601, Vancouver, BC V6B
4H6; 604/685-5618, fax 604/685-7813,
email slidf@wimsey.com.

BC Wild (Earthlife Canada): Box 2241
Main Post Office, Vancouver, BC V6B
3W2; 604/669-4802, fax 604/669-6833.

The Web: Electronic network
connecting environmental NGOs.
Email outreach@web.apc.org.

United States

Save America's Forests: 4 Library
Court SE, Washington, DC 20003;
202/544-9219.

Ancient Forest International:
PO Box 1850, Redway, CA 95560;
707/923-3015.

Native Forest Network: PO Box 60271,
Seattle, WA 98160; 206/545-3734,
fax 206/542-1356.

Forest Reform Network: 5934 Royal
Ln., Suite 223, Dallas, TX 75230;
phone/fax 214/352-8370.

Natural Resources Defense Council:
1350 New York Ave. NW #300,
Washington, DC 20005; 202/783-7800,
fax 202/783-5917.

EcoNet Home Page: Links to individual
EcoNet member groups on the World
Wide Web.
URL http://www.igc.apc.org/igc/en!_.html.

A HARD LOOK AT SOFTWOODS

BY PETER WARSHALL

THE WHOLE EARTH is in transition from old-growth forests to either managed forests or tree plantations. In the United States, leaving aside "preserved" acreage, this conversion will be complete by 2000 (in the South) and 2010 (in the Doug fir region). The Earth is trading trees like Australian eucalyptus and US Monterey pine for faster and faster biomass growth. Given the North's relentless appetite for softwoods and the South's need for both fuelwood and agricultural land, there's no turning back.

While we wait for the tree-farm trees to reach harvestable size, consumers can relax. There will still be enough trees. The volume of tree biomass has been increasing in the United States and internationally, despite tree harvests, hurricanes, acid rain, and spruce budworm. The softwood supply is not in jeopardy. The demand for paper pulp and housing lumber can be met for the next fifty years, which is about as far as any human dare look.

Nevertheless, in the next decade, the lumber price will increase (maybe 2 to 3 percent per year after adjustments), the monthly price will be volatile, the quality of sawn logs will deteriorate, and the complexity of the forested landscape will be simplified. Younger, fast-growing plantation trees will increasingly replace older, slower-growing natural stock. Judges have already eliminated Select and Finish A grades. The best you can hope for is B and Better (B & BTR). The questions are: Can we retain any sanctuaries of specific forest communities relatively free of human disturbance as living museums, gene banks, ecological universities, natural service providers and, for some of us, sources of pleasure and peace? Do we have the will, practical strategies, and multinational muscle to do it?

Contributing editor Peter Warshall is an ecologist, naturalist, and watermaniac.



Redwood and Douglas fir are two of the most sought-after softwoods. With so much old growth logged, the future forest will be predominantly reseeded, genetically altered Douglas fir that will be harvested in forty to sixty years.

WOOD SAVINGS

The forest products business can slow the cutting of trees despite increasing demand. Wood saving comes from more product per tree, substitutes for trees, reusable tree products, and trees that grow faster.

Trees now yield *more product per tree* because high-tech saws slice more carefully and electronic eyes find the flaws, maximizing useful product. Wood is increasingly an engineered product, with plywood, veneers, composites, and other laminated boards replacing solid lumber. Engineered woods use up all the mill residues. Designed-in-the-factory structures such as home trusses can save 30 percent compared to on-site trusses.

Fertilizers, pesticides, fire management, biotechnology, genetically "improved" stock, proper spacing and thinning — in short, high-tech forest management — has allowed private plantations to grow trees faster and bigger. When the plantations of the 1950s and 1960s reach twenty to thirty years (which for plantations is a "mature" loblolly) or forty to sixty years (a "mature" Doug fir), the supply will relieve some of the pressure on other harvests.

Recycled paper and cardboard, paper substitutes (kenaf, agricultural byproducts, hemp), and reusable salvage construction lumber have entered the market. At the same time, paper and salvage demolition have become America's most voluminous fillers of waste dumps. With the cost of landfill skyrocketing, paper recovery and secondhand lumber have the win-win advantages of saving dumping costs as well as reintroducing a non-product into the economic stream.



Ponderosa pine (front) as well as western white pine, sugar pine, Engelmann spruce and Douglas fir are the most sought-after softwoods of the montane forests of the west.



Southern yellow pine (loblolly, slash and longleaf) forests are the dominant trees of the southeast softwoods. Few old-growth stands are left. Loblolly will replace much of the Pacific Northwest softwood supply in twenty years.

Aluminum and vinyl siding have captured a solid market share. Plastic veneers now come in oak and maple images. Steel studs are trying the market's edge. Non-wood substitutes save trees but may, like aluminum and steel, cause comparable environmental damage. Globally, one major use of trees is still fuelwood. Petroleum (especially natural-gas-based stoves) would save forest biomass.

SAVING WOOD IS NOT SAVING PRECIOUS FORESTS

Softwood savings is economically friendly, with a few environmental-friendly aspects such as slowing harvest rates or allowing more annual growth. It helps producer/consumer prices by more efficiently converting the tree into pulp and solidwood timber. But it is not robustly sustainable. Increased efficiency can simply increase supply and lower prices, which perpetuate demand. Wood savings does not necessarily decrease consumption. Wood savings does not necessarily save forests. Just as water conservation can lead to more and denser housing development, wood savings technologies can encourage sales and conversion to tree farms as the most efficient technique to increase biomass output. The US consumes five times the volume of forest products per person as the average developing nation, and three times the planet's average. Only a major "de-consumption" program would have a major impact on harvesting rates of softwoods.

Only if the wood savings actually transforms itself by clear linkages into forest conservation does it contain an ecologic.

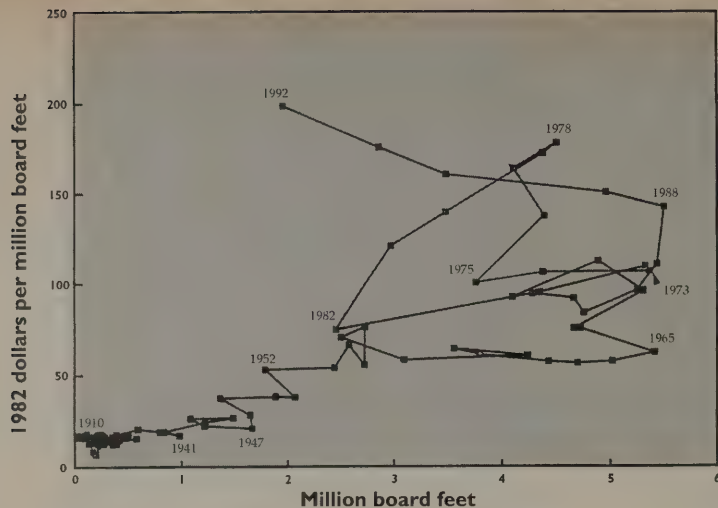
WILD CARDS AND MAJOR UNCERTAINTIES

So that you don't agree too easily that future softwood supply and relatively slow-moving prices are a sure thing, here are a few wild cards that should humble any prophet.

One: The reduction of *acid rain* would help wood savings, ecosystems, and prices. An increase in acid rain would stimulate faster cutting of the dead trees (temporary price breaks and supply) but more expense for human infrastructures to replace the deteriorating forest ecostructure.

Two: *Natural disasters* appear to be more frequent. Insurance companies lobby for subsidized taxpayer insurance to cover their own inadequate insurance. With forests collapsing to hurricanes or frying in unexpected drought, the pricing of timber shows strange spikes with unpredictable impacts of purchases. For conservationists, the forest saved today may be the forest flattened tomorrow. Thoroughly artificial management of the new forests with pesticides, herbicides, and fire control confuses forest economists and conservationists. Economists have more difficulty predicting supply, forest health and growth, and price relationships. Conservationists can no longer sit back comfortably with the forest acreage that they feel is "safe" from the chainsaw or weather. What was "minimally viable" in the early 1900s may be too small today.

Three: *Harvesting and access equipment* will either help watersheds or increase the wreckage. Under pressure from the public and the Forest Service, the industry has been developing harvesting machines



This graph shows price movements of Doug fir in the Pacific Northwest. This is a typical example of the "Fly Scenario," named after the trajectory of a fly that has just left a sewer vent but remains within its envelope of odors.

that reduce erosion and fishery damage. But the same equipment now allows extraction of trees that were once "off-limits" because of unavoidable watershed destruction or inaccessible locations. Watch the boreal forests of Canada for a machine that can cross tundra and permafrost. Watch for increased helicopter logging. New access and harvesting technology must be tamed, or watch it go wild.

Four: Many American *wood-based homes* are reaching the end of their lifespan. Wood rot and termites increasingly advertise their superiority. How many homes will need repairs and renovations? The scale of need and what materials they will utilize are unknown. America, like Japan, is a wood-loving nation, and the market may boom after 2000. Protected forests, including national parks, could become sources of timber.

Five: The *global supply* is uncertain, with each of the top ten softwood suppliers (see box) going their own merry way. When the world is so uncertain, wood dealers and speculators think very short-term. Non-sustainable harvests tend to parallel uncertainty. Watch the disorganized Siberian supply chain, acid-rain-plagued Europe, public policy about sustainable forestry in Canada, the endless conflicts in the Pacific Northwest over taxpayer subsidies for old-growth clearcutting, the holding back or hasty release of softwoods from plantations in Chile and the American Southeast, and the introduction of new utility-tree species, such as alder and aspen. All these confound import/export scenarios. The wood products industry and their economists have become jumpy. Global conservationists, unable to safe-harbor any specific region and forest type, are equally jumpy.

The conservative attitude in the face of so many wild cards is: hold as much old-growth and ancient forest as possible out of the softwood products market. Wait until the softwood markets are less volatile so harvesting plans, prices, and purchases can stabi-

lize. Wait until we have a less volatile (or better-understood) biosphere. Anyone sell patience pills?

CONSERVING SOFTWOOD FOREST COMMUNITIES

How do we save viable acreage of specific softwood forest types? Redwoods, the Klamath Mountain mixed evergreen, Red fir, Coastal true fir with hemlock, special Canadian Black spruce or White spruce/fir communities, northern pine barrens, the southeastern flatwoods and pine savannas — and this is just a start, just in the United States. There appear to be only two strategies: remove special forests from the marketplace, or manage the markets. I know of no free-trade or libertarian market scenario to preserve particular forests.

Land preservation is the name of the game. In the purely private sector, we rely on morality, vision and personal bucks. Doug Thompkins (former owner of Esprit) purchased tens of thousands of acres of Chilean araucaria and alerce forests. Through donations, The Nature Conservancy has removed prime softwood forests from the tree meat market. But small companies that advertise wood savings (kenaf paper, recycled sawn wood) must still figure out how to link their actions to specific forest saving.

In the public sector, morality and money are more fickle. National monuments or research-area forests help thwart major land use changes on public lands. But it's all up to special-interest groups, state land commissions and Congress. Today's sanctuary could be tomorrow's clearcut.

Public/private-sector fusions are the soil of fertile action. Ecotrust (private) helped the Haisla Indians (private) receive 800,000 acres of softwood forest back from the Canadian government (public) and a timber concessionaire (private). (See *WER* 85:18.) Land Trusts helps private landowners slow forest conversions to farms or subdivisions by offering

easements, tax breaks, and inheritance benefits. The Nature Conservancy buys land and then gives it to public agencies with binding nondestructive sales agreements.

NONCONSUMPTIVE USES

Forests could be considered bioengineered ecosystems with many functions such as erosion control, humidification, carbon sinks, fishery infrastructure, and gene banks. These services are hard to price, though economists are trying to use price equivalents by comparing them to engineering works and including restoration costs. Relatively nonconsumptive forest value in ecotourism is equally tricky to price. Economists could try to invent a "rarity" value, such as is placed on gemstones, for specific ancient groves. Perhaps these "real prices" would place the planet's most cherished forests out of the reach of the harvest machines. Perhaps not.

The "existence value" of a specific forest community ("these trees are good because they are awesome") is essentially beyond economics. Dollars do not translate into reverence. Cut-and-run bubbas know this. That's why, when you sleep with your arm over the giant root of a redwood and pass into serenity, you will be called a pagan and a druid. The Protestant Ethic cannot absorb a nonutilitarian unpriceable need.

LOCAL/GLOBAL WORKING RULES

Saving a forest here may simply chainsaw a forest somewhere else. A brilliant negotiator could implement a trade agreement to establish a worldwide system of softwood trade-offs that might shape supply and, simultaneously, conserve specific species or forest types. But, to the GATT and NAFTA crowd, this "managed" market is taboo. Even if the rules were written, cheaters, shirkers, and thieves would make them hard to enforce. The near future is in the trenches: free-traders trying to dismantle tariff barriers, quotas, ceilings, and rules of origin, as well as standardized milling sizes, vs. Citizenries for Ecosystem Preservation fighting with blunt populist tools such as non-tariff barriers (Europe's green labeling), boycotts and buycotts, phyto-sanitary and health restrictions. (A typical health restriction would limit out-gassing from engineered woods.)

WHAT DO YOU MEAN, SUSTAINABLE?

Saving wood is not saving specific trees. It is not softwood supply for solidwood products and paper that is threatened, it's particular forest types. At the moment, the only solutions seem to be to buy the forests or to create a civic religiosity that can out-lobby any other special-interest group. All other solutions contain enormous "ifs."

A SPOTTED OWL AFTERWORD

The spotted owl — though it lives among elder softwoods — does not enter the stage front-and-center. The spotted owl is an economic foil and also a precise symbol for the real issue: remnant forest ecosystems. The desire for rampant logging burns hottest in the hearts of exporters, not loggers. Locally, logger/conservationist deals can be worked. But the exporters have invested heavily in docks and shipping and the cheap dollar and the insatiable Japanese appetite for cheap beautiful cants. Exporters want more high-quality wood and have little concern if it's harvested by hand or by a totally automated process.

The Top Ten in Softwood Growing Stock
Eastern CIS
Western Russia/Eastern Europe
Western Canada
US/Pacific Northwest
Eastern Canada
Asia-Pacific
Nordic Europe
Western Europe (no longer a major player)
US/ South
Chile and other plantations (Brazil, Australia, etc.)

The news media are a sick Greek chorus. When the Georgia Pacific railroad went on strike in 1989, 1992, and 1993, the price of wood immediately elevated. But no one mentioned the strike, only the spotted owl. When two major hurricanes hit the South, and then California had its earthquake, and then the Gulf War played itself out, the price leaped upward. But once again the owl got blamed. Higher prices are so confused with the mythology of softwood scarcity and lost jobs that futures market speculators and concessions bidders on public land have inflated prices further, and further inflated the myth. Watch the difference between speculative buys and final cash-outs and the pattern is obvious.

At fault are ideological economists, not heathen biologists. The lack of complexity in the prevailing understanding of single-event price spikes, yearly prices, five- or ten-year averages, seasonal price variation, etc., is appalling and has created false opponents. Economists still believe the market ("free" or "managed") is somehow rational and nonpolitical. Meanwhile, the guys who make those speculative forest overbids are still pointing their collective finger at the spotted owl. 🦉

Net Drainage

BY MICHAEL J. FURNISS AND ANDY ALM

The Internet is constantly being redefined — and it is growing at a frenetic pace, with every new use people can think of. The Net's most popular facet now is the World Wide Web (WWW), a phenomenon from the European Particle Physics Laboratory. Only two years old, the Web provides easy access to a bewildering breadth of information.

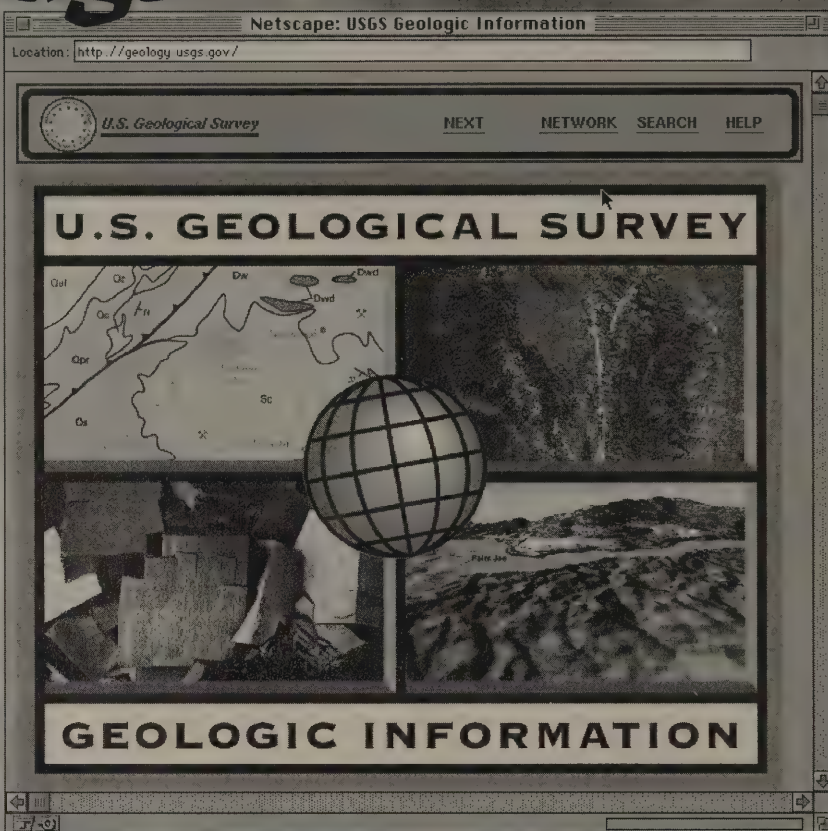
With its capacity to "hyper-link" text, pictures, and even sounds, the Web is a good medium for most kinds of environmental information. Want to see soils, streams, and slope steepness all plotted together for your watershed? Keep reading.

The WWW is intensely intra-referenced: most Web pages have links to similar or related sites. (A particular body of content is called a Web site, made up of Web pages. The main page at a site is called a home page.) Web authors usually try to anticipate the interests of their visitors: "If you decided to come here, you might also want to go here and here and maybe here." By following links from one site to the next, you can find both expected and unanticipated subtopics. Or you can get lost, which is also fun. Fortunately your browser (Web software) drops crumbs to help you find your way back to what you thought you wanted to do in the first place.

To get started, you only need some good entryways — sites with high-quality links that will lead you into the labyrinth. ☛

Michael Furniss <furniss@watershed.org> is a wildland hydrologist and topsoil evangelist. Andy Alm <aalm@igc.apc.org> cultivates education programs for EcoNet at the Institute for Global Communications. Both make their homes in Arcata, California.

This article, and hotlinks to its URLs, are accessible at our WER Web site: <http://www.well.net/mwec/wer/netdrain.html> We will add other web resources to the list as we discover them; recommendations are always welcome. For more on matters Webbish, see WER 86, pp. 80–87.
—Winslow Colwell



EARTH

USGS Geology Information
<http://geology.usgs.gov/>

A world of geologic information, projects, programs, and maps. This agency's was among the first of the government servers. USGS servers still look and work the best, though NASA's run a close second.

Institute of Soil Sciences
Department of Agriculture,
University of Gottengen
<http://vendigo.uni-soilsci.gwdg.de/einf-br.htm>

Nice pictures of soil profiles, lecture notes, and bulletins, in English and German. This server has links to other soil-related sites worldwide:
<http://vendigo.uni-soilsci.gwdg.de/wwwwbr.htm>

Cybersoils
Massey University
Department of Soil Science
<http://www.ghort.massey.ac.nz/departs/soilsc/cysoil/soildep1.htm>

This New Zealand server is mostly potential. Watch to see if it achieves its

vision of itself as the place to start for world soils information.

California Rivers Assessment
http://ice.ucdavis.edu/California_Rivers_Assessment/

A fine example of serving place-based information, based on watersheds, taking advantage of modern computer mapmaking capabilities. Request a map showing specific things to get a taste of what's to come in access to public geographic data.

This server can also create a high-resolution version of your custom map and place it in a publicly accessible computer for your retrieval. Good links too.

Make a Map with NAISMAP
<http://ellesmere.ccm.emr.ca/wnaismap/naismap.html>

Choose what lines and resources you want on a map of Canada and this system will serve you a lovely full-color map, usually in less than a minute. The National Atlas Information Service (NAIS) of Canada sponsors this site. Where's the US equivalent?

WATER

GREEN

(Global Rivers Environmental Education Network)

<http://www.igc.apc.org/green/green.html>

This site has the most current index of watershed topics we've found — "Watersheds on the Internet." Good point of embarkation for environmental research.

EcoNet's Water, Seas, Oceans, and Rivers Directory

<http://www.igc.apc.org/igc/www.water.html>

An index of Web sites addressing aqueous parts of the Earth.

CERES

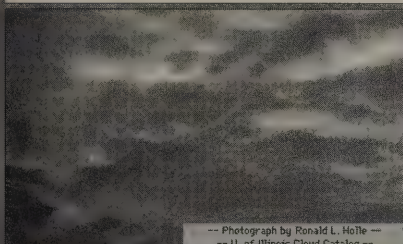
(California Environmental Resources Evaluation System)

<http://resources.agency.ca.gov/>

The goal is to become a comprehensive repository and access point for all data about the state's environment. Still mostly potential, but off to a fine start.

USGS Water Resources of the United States

<http://h2o.er.usgs.gov/>



--- Photograph by Ronald L. Helle ---
--- U. of Illinois Cloud Catalog ---

AIR

NOAA's Climate Diagnostics Center
<http://www.cdc.noaa.gov/>

Lots of resources and links related to climate change, both short- and long-term. (Climate modeling is the most computer-hungry field there is. Somebody once said that the only computer fast enough to model the atmosphere is the atmosphere itself.)

Joint Institute for the Study of Atmosphere and Ocean

<http://tao.atmos.washington.edu/>

Lots of good links here.

Scripps Institute of Oceanography
<http://meteora.ucsd.edu/weather.html>

University of Illinois Cloud Catalog
<http://www.atmos.uiuc.edu/covis/modules/clouds/html/cloud.title.html>

This site has a wealth of information about waters, streams, and rivers, with access to the enormous USGS archives.

Water On-Line

<http://resources.agency.ca.gov/ceres/WOL/home.html>

This nonprofit consensus project advances the use of the Internet to help solve California's water problems. Other nonprofits that want to be more public could take a cue from this one: the site even includes their meeting minutes.

Hydrology Web

Earth and Environmental Sciences Center

<http://etd.pnl.gov:2080/hydroweb.html>

From the Pacific Northwest Laboratory in Washington, this site is rich in resources and links.

COMMUNITY

The Internet's interactive channels are too numerous to list. Email is still the most important use of the Net. News groups, mailing lists, and bulletin board systems (BBSs) facilitate interaction with people of like interests and work. Usually opening one door will reveal the relevant others. Post a question to a group or mailing list about what you are looking for and the answer, or a good clue where to look, will almost certainly come back.

Mailing Lists

You can subscribe by simply sending email to `LISTSERV@<name of the server>` and in the body of the message put `SUBSCRIBE <Name of list>` `<Your Name>` (e.g. `SUBSCRIBE HYDROLOGY Lucy Raindrop`).

Anything posted to the list goes out to all subscribers.

Mailing lists come and go, and lists of the lists tend to be out of date. Try the Web site [Publicly Accessible Mailing Lists at](http://www.neosoft.com/internet/pam/)

<http://www.neosoft.com/internet/pam/>

The best way to find other lists is to post a question to a list that's close, subjectwise.

Registries

Register yourself or your projects so that others can contact you.

FIRE

NASA's Solar Data Analysis Center
<http://umbra.gsfc.nasa.gov/images/latest.html>

Pictures of the sun, mostly in ways you have never seen it.

Space Environment Laboratory
<http://www.sel.noaa.gov/>

Real-time monitoring and forecasting of solar and geophysical events.

Mees Solar Observatory in Hawaii
<http://koa.ifa.hawaii.edu/>

White Light, Calcium-K, and Stokes Magnetograms of the sun. Worth looking at even if you don't know what this means.

World Space Weather Service
<http://www.sel.bldrdoc.gov/iuwds/iuwds.html>

Good index to other solar sites.

California Watershed Projects Inventory
http://ice.ucdavis.edu/California_Watershed_Projects_Inventory/

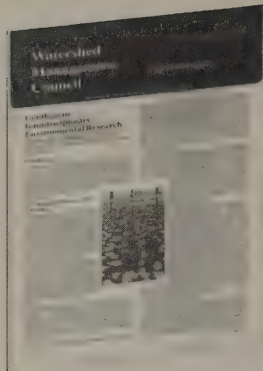
The idea is to establish a database and geographic information system. The goal is to improve statewide access to information on watershed projects and associated data in California.

The Watershed Registry

This one is for people rather than projects. It's focused on connecting people working on watershed projects or water quality projects so they can solve common problems. It lives on a BBS called the Nonpoint Source Info Exchange. Sponsored by the EPA. It's one of the best of the government-sponsored environmental systems. You can reach it at 301/589-0205, or (if you are patient) via the Internet, through the FedWorld gateway. (Telnet to Fedworld.gov and follow the instructions from there.) This BBS has a current list of other environment-related BBSs.

Watershed Management Council Email Registry

The Council is accumulating email addresses of people interested in watershed work. If you send yours in, it will be printed in their newsletter. You might get a pitch to join the Council if you aren't already a member. To be added to the list, send email to furniss@watershed.org



Watershed Management Council

In our recent water issue, we somehow missed this crucial networker. Sorry! The Council produces a newsletter and registry for those already committed to watershed work. Not an intro, but the whitewater plunge. Topics range from road construction to revegetation, commonly encountered problems in watershed work, and the latest tools. Very strong Pacific Coast orientation. —Peter Warshall

The term “watershed” refers to areas of land from which surface waters flow. Unfortunately, the term is used without consistent size discrimination. Some existing terminology, such as Accounting Unit, does not connote any relationship land areas. . . . Use of a common terminology to describe the nested and relative sizes of successively smaller areas would help to minimize the confusion that exists today. The terms Region, Subregion, River Basin, Subbasin, Watershed, Subwatershed, Drainage, and Site are recommended.

Watershed Management Council

Membership \$25/2 years, includes newsletter
c/o Barbara Machado, 417 Broadway, Salmon, ID 83467

Influences of Forest and Rangeland Management on Salmonid Fishes and Their Habitats

Rainbow trout, steelhead trout, and salmon belong to the group called salmonids. They rely on relatively pristine freshwater habitats for part or all of their life. These habitats originate from, and thus reflect, the entire watershed, from ridgetop to waterbody. Land use profoundly affects the watershed and its ability to support healthy salmonid populations.

Most of the best remaining habitats are in the upland watersheds where the predominant land uses are forestry and grazing. This book examines, in rigorous detail, the many and varied interactions between these land uses, freshwater aquatic habitats, and the fishes that need them. Approaches that do and do not conserve fish habitats, and linkages that must be understood when devising management for a particular place, are academically described.

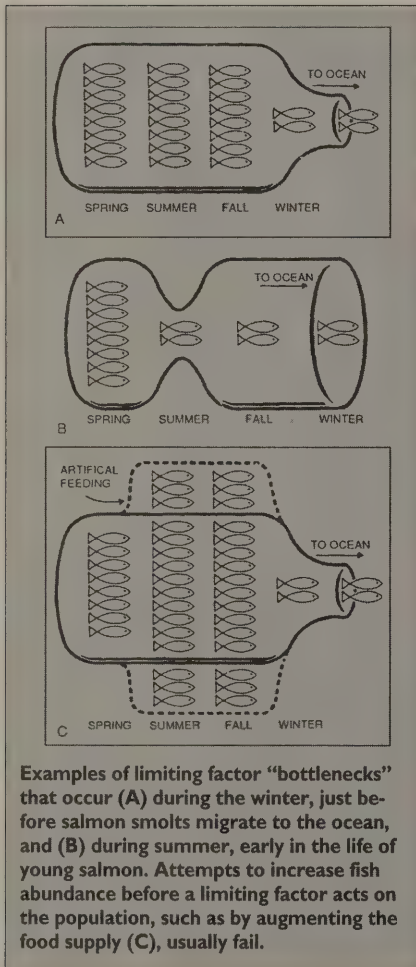
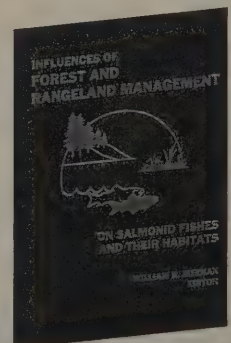
This book's eighteen chapters were written by thirty-five recognized experts. They have been woven into a coherent and far-reaching treatment of this complex topic. Most everyone agrees that we should recover depleted fish stocks and conserve what healthy populations remain. Doing so is rarely simple, easy, or cheap. This book shows why. —Mike Furniss

The most successful method of habitat rehabilitation has been watershed protection. Hynes (1975) effectively made the case that a stream and its valley are an inseparable ecological unit. A stream rehabilitation program will be effective only if the watershed is concurrently protected.

The goal of resource managers should be to maintain the integrity of a stream system and its streamside zones (Everest et al. 1987a). All of the habitat modification techniques discussed in the following pages, whether they pertain to spawning, rearing, or some other habitat, have had variable successes. These methods cannot be relied upon to mitigate poor management practices. The importance of preventing habitat degradation now, instead of being forced to rebuild habitats in the future because of today's management practices, cannot be overemphasized. Protection of habitat is by far the most effective stream rehabilitation and enhancement technique.

Influences of Forest and Rangeland Management on Salmonid Fishes and Their Habitat

(Special Publication #19)
W.R. Meehan, Editor. 1991; 751 pp. ISBN 0-913235-68-7
\$68.50 (\$70.50 postpaid). American Fisheries Society,
Publication Fulfillment, PO Box 1020, Sewickley, PA
15143; 412/741-5700



Examples of limiting factor “bottlenecks” that occur (A) during the winter, just before salmon smolts migrate to the ocean, and (B) during summer, early in the life of young salmon. Attempts to increase fish abundance before a limiting factor acts on the population, such as by augmenting the food supply (C), usually fail.

A Watershed Assessment Primer

Once you know what you want (swimmable water, more fish, healthy riverside plant life and wildlife, drinkable water), then you must ask: What do I know? Do I know how bad the situation actually is? Do I know the best tools to pinpoint the root of the problem? Do I know how to work with the organizations, agencies, and citizens involved?

This primer focuses on knowing. It restricts itself to non-point pollution (the pollution that washes off the land, not from a clear source like a pipe). Rather impersonal in tone, it is nevertheless the best current guide to working in the world as it actually functions. It summarizes techniques and federal laws crucial to any citizen who has taken the plunge from idealism into the human quagmire of trying to create healthier and safer communities. —Peter Warshall

Screening Questions for Watershed Assessment Selection

Which beneficial uses of water and/or the watershed does the method consider?

Does the method identify watershed processes and lead to understanding of causal links?

Does the method evaluate the risk to beneficial uses from impacts?

Does the method assess the resilience of the landscape? Does the method identify biological diversity and existing watershed resources?

How many seasons are necessary for repeated field measurements?

What technical skills are required for the analysis?

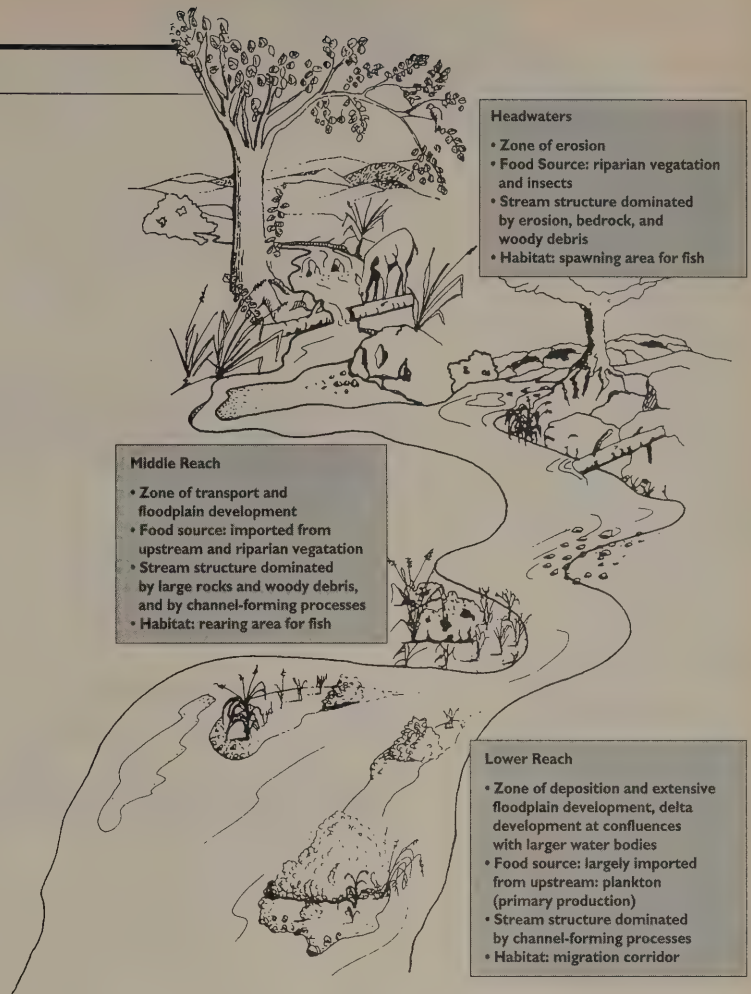
Expert systems include both expert opinion and computer models developed to act as experts. Expert systems are the most common approach to watershed impact prediction. They give professionals a chance to incorporate their knowledge and experience in the assessment of a complicated problem without the need to justify or codify that opinion in regression-based or physics-based algorithms. This is not a deficiency, but a reasonable response to the great diversity of natural systems, human impacts, and the variety of natural processes involved in water pollution and watercourse degradation.

The necessary attributes of a watershed assessment strategy are:

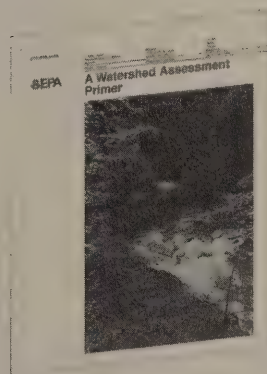
- flexible, to focus on particular issues,
- diverse, to assess the spectrum of resources and uses,
- scientifically based, to find the causal links with degradation and thus allow meaningful recommendations,
- robust, so they may be applied by people with limited training,
- strict, so protocols are kept and separate studies may later be compared,
- time intensive, so they may be applied throughout the year,
- statistically strong, so they are not thrown off by variation in environmental parameters,
- cautious, so important or sensitive elements are not overlooked,
- mutually agreed upon, so that their recommendations may be implemented, and
- part of a long-term management strategy.

A Watershed Assessment Primer

F.D. Euphrat & B.P. Warkentin. USEPA Region 10, 1994; 191 pp. EPA Publication 910/B-94/005. Available late 1995 from National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161; 703/487-4650, telnet fedworld.gov, ftp.fedworld, http://www.fedworld.gov



Stream characteristics for watershed analysis.



The material on these pages is culled from the massive number of newsletters and magazines and other forms of PR I have to read to stay current with sustainability issues.

• Special thanks to **Common Ground**, the Conservation Fund newsletter, from whose pages I found out about several of the items that appear here. **Common Ground's** intelligent green thumbs continually, carefully prod the American cash register toward sustainability.

COMMON GROUND™

Common Ground. Free, bimonthly.
The Conservation Fund, 1880 N. Kent Street,
Suite 1120, Arlington, VA 22209; 703/525-6300.

With Congress in moral collapse, some corporations help restore the planet.

Congress is no place to search for funds to heal Earth. Gore's been gagged and hog-tied. A few corporations now show greater respect and interest in enhancing ecosystems. If you work for a company that needs prodding, give them the phone number



of the Wildlife Habitat Council. Eighty-five corporate members have initiated habitat enhancement on 285,000 acres of corporate lands, including rights-of-way, mines, and manufacturing headquarters. Over one hundred sites in thirty-six states and three

foreign countries. Sites must be re-certified every two years to insure compliance.

Wildlife Habitat Council. 1010 Wayne Avenue, Suite 290, Silver Spring, MD 20910; 301/588-8994, fax 301/588-4629.

Very Grim Fairy Tales and Facts

Much doublespeak is spoken on the takings issue (paying property owners if some government action allegedly lowers their property value). It will die a slow death. 1999: An upper-class neighborhood sues a county for allowing a developer to build lower-income housing in the neighborhood. The low-income housing will bring in fast-food joints and increased robbery and lower property values. The upper-crust homeowners ask the court to decide if the allowed zoning by a county government is a takings.

As this luddite issue starts to develop gray edges, watch politicians run. Meanwhile, the press has done a typically piss-poor job of looking at each example, especially the stories of Democratic Representative Billy Tauzin. This pamphlet delves a bit deeper into each takings anecdote, and finds (surprise!) that many property owners involved have no beef with the government.



Very Grim Fairy Tales and Facts. National Wildlife Federation, Public Affairs Department, 1400 16th Street NW, Washington, DC 20036; 202/797-6850.

Money where our binocs are.

We spend \$18 billion each year to watch wild critters. Birders alone spend \$5.2 billion. The International Association of Fish and Wildlife Agencies is promoting a plan where recreational businesses (like manufacturers of binoculars and RVs) would give a percentage to a fund to help save wildlife. The fund would go to non-game species through state agencies. Call the US Fish and Wildlife Service and ask for free copies of these publications.

International Association of Fish and Wildlife Agencies. 444 N. Capitol Street NW, Suite 544, Washington, DC 20001; 202/624-7890. *Economic Contribution of Bird and Waterfowl Recreation in 1991* and *The Economic Impact of Birding Ecotourism on Communities Surrounding Eight National Wildlife Refuges.* Both free. US Fish and Wildlife Service, US Department of the Interior, Washington, DC 20240; 703/358-2504.

Genuine hemp fabrics from The Ohio Hempery.

Silk
60% Hemp
40% Silk

Summercloth
100% Hemp

True Denim
100% Hemp

Denim Blend
55% Hemp
45% Cotton

Muslin
55% Hemp
45% Cotton

Canvas
100% Hemp

Herringbone
100% Hemp

The Ohio Hempery

One acre of hemp, which takes a few months to grow, can supply four times as much paper fiber as an acre of trees — at least, old US government reports promoted hemp with these statistics. Yet states forbid farmers to enter the increasingly lucrative hemp market, giving the profits to China and Hungary. Even Calvin Klein and Ralph Lauren see hemp cloth as a boost to business. The Ohio Hempery grossed \$2 million last year on hemp products.

The Ohio Hempery. Catalog free. 7002 State Route 329, Guysville, OH 45735; 800/BUY-HEMP, fax 614/662-6446.



Agricultural Research Service (USDA): Quarterly Report

It's the free futurist newsletter about the food you eat and the food web that nurtures it. Here's a sample of the paragraph-length stories:

- What a woman eats while she's pregnant may have a long-term effect on the amount or location of body fat in her adult children.
- Beneficial wasps have one of the highest success rates of all biocontrols that protect US crops.
- Bright orange cucumbers loaded with betacarotene could be the end product of cucumber breeding research.
- A new, easy-to-use trap catches both male and female Mediterranean fruit flies.
- A parasite found in dogs could be causing up to half of all cattle abortions.
- The boll weevil's "sweet tooth" helped scientists breed cotton that's too "bland" for it.

Quarterly Report of Selected Research Projects. Free. ARS Information, 6303 Ivy Lane, 4th Floor, Greenbelt, MD 20770; 301/344-2723. gopher.nalusda.gov, URL: gopher://gopher.nalusda.gov:7011/ag_pubs/usda_ars_qr

Farm Animal Welfare: Crisis or Opportunity?

Discusses the Swedish method of humane pork production and the Pastureland Farms humane marketing project.

Farm Animal Welfare (Crisis or Opportunity for Agriculture?). Marlene Halverson. 1991; 68 pp. Staff Paper P91-1. Free. Waite Library, University of Minnesota, Dept. of Applied Economics, 1994 Buford Avenue, St. Paul, MN 55108; 612/625-1705.

Mainstream Greenbacks

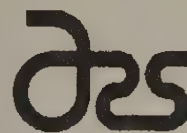
One of the really useful federal agencies is the General Accounting Office. When not crushed by politics, they are our insider truth squad. They usually confirm what is obvious, but that's how the outside imagination crawls inside. **Environmental Auditing** explains that strong management, adequate work force and funds, and freedom from outside pressure are the fundamentals of good eco-audits. They can even reduce expenditures, especially legal and cleanup fines.

Environmental Auditing (A Useful Tool That Can Improve Environmental Performance and Reduce Cost). 1995; 94 pp. Document #GAO/RCED-95-37. Free. Superintendent of Documents, US General Accounting Office, PO Box 6015, Gaithersburg, MD 20884-6015; 202/512-6000, fax 301/258-4066.

Tradition Bond Tree-Free Paper

The non-wood sector of the pulp and paper biz is here. Tradition Bond is 10 percent hemp, 60 percent agricultural byproducts, 10 percent esparto grass, and 20 percent post-consumer recycled material. This is the first hemp-content paper milled in the US on a commercial basis. The most exciting aspect is the use of agricultural fiber wastes. It cuts back on field-burning (carbon dioxide) and landfill-stuffing (disposal costs). One essence of sustainability: internalizing external costs for profit. **Talking Leaves** is their global ecology journal.

Talking Leaves Journal. Carolyn Moran, Editor. Deep Ecology Education Project, \$18/year (4 issues). Living Tree Paper Company, 1430 Willamette Street, Suite 367, Eugene, OR 97401, Cascadia Bioregion; 800/309-2974, fax 503/687-7744.



Paper Company

1-19 yards \$18/yard
60" wide #H51

1-19 yards \$15/yard
58" wide #H2

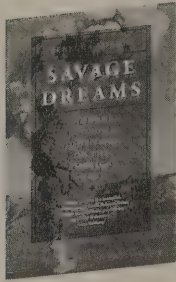
1-19 yards \$20/yard
59" wide #H1

1-19 yards \$12/yard
59" wide #C13

1-19 yards \$9/yard
44" wide #C2

1-19 yards \$18/yard
59" wide #H51

1-19 yards \$20/yard
59" wide #H31



Savage Dreams

(A Journey Into the Hidden Wars of the American West)

Rebecca Solnit. 1994; 401 pp.
ISBN 0-87156-526-9

\$22 (\$25 postpaid). Sierra Club Store
Orders, 730 Polk Street, San Francisco,
CA 94109; 800/935-1056

Savage Dreams

This book contains many vignettes and ideas that float in and out of my skull, but one especially continues to compel and scare me. It's the story of the original nuclear physicists — Werner Heisenberg, Neils Bohr, Max Planck, Lise Metner — and the walks where they discussed their experiments, walks that led to the Bomb. I had always assumed these scientists were, if not unconcerned with humanity, at least criminally ambitious. It is Rebecca Solnit's revelation of their gentleness and naïveté that scares me so; the quest for understanding is infinitely corruptible.

In *Savage Dreams*, Solnit wonderfully combines narrative, history, personal experience, and ecology in an exploration of ignored Western wars. She examines the war against the Earth at the Nevada Test Site, and the efforts to hide the war on indigenous tribes of Yosemite Valley. Solnit reveals the hidden histories. The people she meets — photographer Richard Misrach, rancher Carrie Dann, the Kurtz-like gold miner James Savage — make *Savage Dreams* thoroughly memorable. —Andrew Needham

I read once that the Mono Lake Paiutes believed that there were two skies, each coming down to rest on the crest of the Sierra Nevada. It was an old unreliable book that I read it in, but the theory does much to explain the profound difference of the two worlds the Sierra divide: the wide-open arid spaces of Nevada, still so sparsely inhabited, and the riot of life — flora and fauna, particularly human fauna — that overruns California.

The two skies may be just a way of describing the rain shadow the Sierra cast over Nevada — as the clouds blow east, the mountains scrape them off the sky, keeping the western slopes wet and the east dry.

There's something profoundly American about getting arrested at the Nevada Test Site: The very issues are, not cowboys and Indians, but land, war technology, apocalypse, Thoreauvian civil disobedience, bureaucratic obscurity, and Indians, part of the great gory mess of how we will occupy this country, whose questions are as unsettling as its land is unsettled. Then, of course, after being unhandcuffed and thrown out, the obvious thing to do is to celebrate, which in Beatty means going to one of the diners-cum-casinos for drinks and American food.

NUCLEAR ACTION

After seeing the videos at right, you might want to contact the following groups:

Concerned Citizens for Nuclear Safety: 107 Cienega Street, Santa Fe, NM 87501; 505/986-1973, fax 505/986-0997, hotline 800/456-8863.

Their newsletter, *The Nuclear Reactor*, and phone tree include the latest on nuclear storage, transport, health risks, and construction plans. —PW

Nuclear Information and Resource Service: Membership \$35/year.

1424 16th Street NW, Suite 601, Washington, DC 20036; 202/328-0002, email nirsnet@igc.apc.org. Membership gets you the *Nuclear Monitor* newsletter and a constantly updated watchdog report on every nuclear facility in the USA. —J. Baldwin

For more on nukes in space contact:

Global Network Against Weapons and Nuclear Power in Space: c/o Florida Coalition for Peace & Justice, Box 90035, Gainesville, FL 32607; 904/468-3295.

Citizens for Peace in Space: Box 915, Colorado Springs, CO 80901; 719/389-0644.

Chernobyl

Dr. Vladimir Chernousenko — the physicist in charge of the Chernobyl cleanup, later expelled from Russia for publicly stating his understanding of the disaster's true dimensions — supplies this 45-minute interview. —Peter Warshall

Three Mile Island Revisited

Another awardwinner, another successful effort at punch-and-jab investigative reporting: as with *Nukes in Space*, this video is not for those who want the news made gentle and sweet. *Three Mile Island Revisited* includes the news that main media ignore — increased cancer rates, quiet buy-offs in damage cases, and multiple birth defects. —PW

Nukes in Space

The winner of all kinds of awards, *Nukes In Space* was one of the ten most underreported stories in the US for each of the last three years. *Nukes in Space* is in-your-face muckraking (it assumes you'll get the government whitewash somewhere else). It reveals the dangers of launching 72 pounds of plutonium to power space exploration (the Cassini Project), the incredible taxpayer subsidies (maybe a fiscal-conservative congress will help), and the clear alternative (solar power). —PW

Nukes on Video



From *Nukes in Space*.

Dr. Vladimir Chernousenko: The Truth about Chernobyl

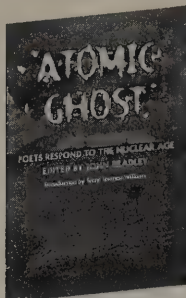
Nukes in Space

Three Mile Island Revisited

\$19.95 each. Add \$2 postage for the first, \$1 for each additional video ordered. EnviroVideo, PO Box 311, Ft. Tilden, NY 11695; 800/326-8846

Atomic Ghost

I'm not a big fan of "agenda poetry" — poetry that tries to make me adopt a particular view or ideology — but John Bradley has collected an engaging, eclectic book of poems concerned with the Atomic Age. As Terry Tempest Williams says, "It is like the Yaqui ceremony, throwing flowers at evil": reading poetic reminders of atomic ghosts before we create more of them. —Peter Warshall



Atomic Ghost

(Poets Respond to the Nuclear Age)
John Bradley, Editor. 1995; 330 pp.
ISBN 1-56689-027-6. \$15.95 (\$18.45
postpaid). Coffee House Press, 27
N. 4th Street, Suite 400, Minneapolis,
MN 55401; 612/338-0125



Explosion

I'm an unthinking dog,
a good-for-nothing cat,
a fog over gutter,
a blossom-swiping rain.

I close my eyes, breathe —
radioactive air! A billion years
and I'll be shrunk to half,
pollution strikes my marrow.

So what — I'll whoop at what
remains. Yet scant blood left,
reduced to emptiness by nuclear
fission, I'm running very fast.

—Shinkichi Takahashi
translated from the Japanese
by Lucien Stryk, with Takashi Ikemoto

"The radio talk . . ."

The radio talk this morning
was of obliterating
the world
I notice fruit flies rise
from the rind
of the recommended
melon
—Lorine Niedecker

At the Bomb Testing Site

At noon in the desert a panting lizard
waited for history, its elbows tense,
watching the curve of a particular road
as if something might happen.

It was looking at something farther off
than people could see, an important scene
acted in stone for little selves
at the flute end of consequences.

There was just a continent without much on it
under a sky that never cared less.
Ready for a change, the elbows waited.
The hands gripped hard on the desert.
—William Stafford

North American Butterfly Association

I highly recommend NABA for promoting non-collecting activities: conservation, gardening, listing, observing, and photographing. They have updated a list of common names of butterflies so you don't have to say "Danaus plexippus" for "Monarch." NABA coordinates 248 annual "Fourth of July" butterfly counts and publishes the data. Their quarterly, *American Butterflies*, is colorful, informative and indispensable — get the nine back issues while they're still available. —John Weber Jr.

Amateur naturalists' counts of birds have been one of the best sources of information on the changing planet. Butterflies and frogs are two other barometers of hope and need. —Peter Warshall



North American Butterfly Association

Membership \$25/year. Includes 4 issues of *American Butterflies* and *The Angewing Newsletter*. NABA Treasurer, 909 Birch Street, Baraboo, WI 53913

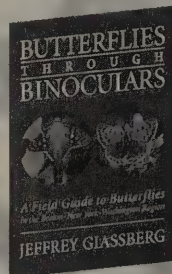
The planting of street trees and backyard fruit trees have caused Western Tiger Swallowtails to actually benefit from the development of the Bay area. The one above is at that awkward age before adulthood. Photographed July 1986, near Yuba Pass, California.



Butterflies Through Binoculars

This is the best butterfly book available. Designed to aid the identification of living butterflies, it includes 300 color photographs of nectaring and basking butterflies as you will see them in real life — these alone are worth the price of the book. Jeffrey Glassberg (President of NABA) has painstakingly (but conversationally) pointed out the fieldmarks, in captions and text.

The species listed are limited to the "Bosnywash" region, but the usefulness of *Butterflies Through Binoculars* actually extends to all of the northern tier of states east of the Dakotas. If only a series of guides of this high caliber existed for all of North America's bioregions! —John Weber Jr.



Butterflies Through Binoculars

(A Field Guide to Butterflies in the Boston-New York-Washington Region)
 Jeffrey Glassberg, 1993;
 256 pp. ISBN 0-19-507983-3
 \$19.95 (\$22.95 postpaid).
 Oxford University Press,
 Order Dept., 2001 Evans
 Road, Cary, NC 27513;
 800/451-7556

- 1) Black Swallowtail, male.
- 2) Black Swallowtail, female.
- 3) Spicebrush Swallowtail, male.
- 4) Spicebrush Swallowtail, female.
- 5) Black Swallowtail, male.
- 6) Spicebrush Swallowtail, male.



The Butterflies of North America



Vanessa Virginiensis sipping nectar from *Solidago* (goldenrod), Faulkland, Delaware.

Here's the second-best butterfly guide. Highlights: color photographs of 679 species; more than 1,800 illustrations (including the confusing skippers, which are like fall warblers for birders!); and broad-brush range maps. Drawbacks: the photos are of dead, spread specimens; the book's hefty size makes it impractical to take out in the field; and many of the "common names" coined by author James Scott are only rarely used, or used only by Scott. —John Weber Jr.

Butterfly Gardening • Landscaping for Wildlife

Planting a garden especially for caterpillars to munch or for adults to flitter around in, sipping nectar, has become a popular topic. According to NABA, there is no perfect butterfly garden book. But I'm partial to the Xerces Society's **Butterfly Gardening**.

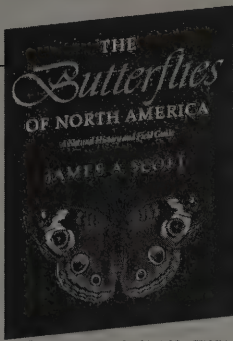
For anyone living in the Midwest, I highly recommend **Landscaping for Wildlife**, with its excellent section on plants for butterflies, bees, and moths. Trees, shrubs, annuals, biennials, and perennials are grouped: "excellent," "good," and "fair." —John Weber Jr.



Butterfly Gardening
(Creating Summer Magic in Your Garden)
Xerces Society. Sierra Club Books, 1990; 192 pp. ISBN 0-87156-615-X \$20 (\$23 postpaid). Sierra Club Store Orders, 730 Polk Street, San Francisco, CA 94109; 800/935-1056



Landscaping for Wildlife
Carrol L. Henderson. Minnesota Department of Natural Resources, 1987; 144 pp. \$8.95 (\$10.95 postpaid). Minnesota Bookstore, Documents Division, 117 University Avenue, St. Paul, MN 55155; 612/297-3000



The Butterflies of North America
(A Natural History and Field Guide)
James A. Scott. 1986; 583 pp. ISBN 0-8047-2013-4: \$29.95 (\$33.95 postpaid). Stanford University Press, Stanford, CA 94305; 415/723-9434

Peterson Field Guide Series

The two guides of widest possible geographical coverage that are also portable are among the **Peterson Field Guide Series**. It's obvious why you would want the most local and bioregional guides, which are too numerous to list but are summarized in two thorough issues of **American Butterflies**. When you join NABA, order these back issues.

Caveat emptor: Make sure the Eastern guide is by Opler (1992 edition), not Klots (1951 edition)! The Klots edition is still stocked by many bookstores.

Caveat 2: We reviewed Robert Pyle's 1981 Audubon Society Guide in MWECS when we should have been talking about these more current and accurate resources. That said, Bob Pyle is still one of the best friends that butterflies have.
—Peter Warshall and John Weber Jr.

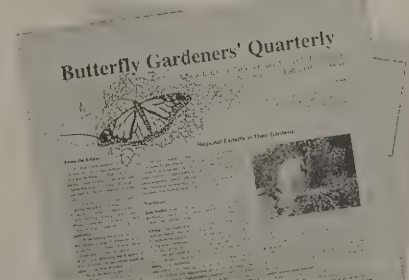


A Field Guide to Eastern Butterflies
Paul A. Opler & Vichai Malikul 1992; 396pp. ISBN 0-395-63279-X \$16.95 (\$19.45 postpaid). Houghton Mifflin Co., Mail Order Dept., Wayside Road, Burlington, MA 01803; 800/225-3362

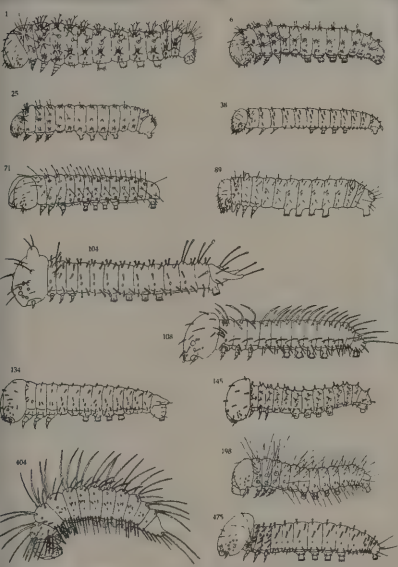
A Field Guide to Western Butterflies
J. W. Tilden & Arthur C. Smith. 1986; 466 pp. ISBN 0-395-41654-X \$14.95 (\$17.45 postpaid). Houghton Mifflin Co., Mail Order Dept., Wayside Road, Burlington, MA 01803; 800/225-3362

Butterfly Gardeners' Quarterly

Since butterfly populations respond directly to ephemeralities like weather, devotees must keep up with the vagaries of seasonal and regional changes. "If you plant it they will come" is the motto of **Butterfly Gardeners' Quarterly**. This informative newsletter monitors goings-on in butterfly gardens all over the country and beyond. It features lists of organizations, plants, and books; product evaluations; regional updates and field trips; reports from readers; and detailed articles on gardening to attract these vibrant beauties.
—Karen Van Epen



Butterfly Gardeners' Quarterly
Claire Hagen Dole, Editor.
\$6/year (4 issues). PO Box 30931, Seattle, WA 98103



The overall appearance of representative first-stage larvae.

Waterwork



Shitwork

Bodies of Water Gather at Huairou

BY FRAN PEAVEY

"I feel like a raindrop coming into the ocean."

—Songwriter from India, greeted by wild applause

WOMEN carry the water in most parts of the world. You could say that water is a women's issue. But water is life, and so it is a human issue. The job of thinking about water has long been solely in the hands of men. And in some places, no one at all has been thinking much about water.

At the Fourth Women's Forum in Huairou, China, Women for Water, a small NGO, sponsored two kinds of waterwork. First, Tova Green and I gathered women to think strategically about water, to share effective strategies and community processes that challenge the downward spiral of water quality all over the world, and to learn how communities care for and make decisions about water. The second activity, which took place nearly every day, was to gather women into water circles.

It wasn't magic or awesome or anything like that. It was simply great. Great to talk with women from all over the world concerned about water and to share cultural rituals in which water plays a part, great to hear about the importance of water in women's lives and to learn what they are doing to provide lifegiving water for their families and communities.

WATER STRATEGIES

One community strategy the women were extremely forceful about was that decisionmaking boards need to be women and men together — that there is danger in leaving either gender to guard the water. When a European woman suggested that cash-heavy countries only fund water strategy groups if they are run by women, the African women responded almost in unison, "We do not want another job that is solely ours. We want

to work together with our men on this and on all other things."

The African women reported that they must walk farther and farther to gather water as waterholes dry up and groundwater becomes undrinkable. One woman suggested, "If you are working against something, take some people from your area to a region that has already lost the battle. Your people will come home and tell their friends, then they will all work harder." Another suggested that it is very important that all sewage treatment treat fecal coliform rather than only biological oxygen demand (BOD). "Our children die from the parasites, not from the lack of oxygen in the water." We appreciated the diversity of the partnerships working together for water. As one Sudanese woman put it, "I may be South and she may be North, but we are both mothers. I have a child. She has a child. Our children need clean water."

An intent group gathered to hear about biological toilets from Pat Costner, a Greenpeace scientist. According to Pat, "Defecating and urinating into water is one of the most irrational and damaging practices adopted by humans. Biological toilets are relatively simple, affordable systems that transform feces and urine into safe, valuable fertilizer that can be recycled directly into the soil. In contrast, once human excreta is mixed with water, removing all its components from that water is prohibitively expensive. The discharge from even the most modern, high-tech wastewater system still contains excreta pollutants, including nutrients and disease-causing organisms. Some of the bacteria, viruses, and parasites associated with human excreta are quite resistant to chlorine, the most commonly used wastewater disinfectant. Moreover, when chlorine reacts with components in the wastewater, toxic chemicals are created — organochlorines — many of which are persistent in the environment."

In the composting-toilet workshop we were surprised to find that all the words for feces and urine in various languages are also swear words or terms of debasement. One woman from England reported she knew no words for excrement. "We

In the composting-toilet workshop we were surprised to find that all the words for feces and urine in various languages are also swear words or terms of debasement.

don't talk about it. It's a class thing, you know." No wonder it is difficult to get people to think clearly about their own waste products' role in the environment.

We decided that toilet-training methods could be made more effective in educating children to think about their bodies' waste products and their relationship to the environment. The shame-based methods used in many cultures seem ill suited to create adults able to think responsibly about their shit. A woman who has built two composting toilets in Kerala, South India, spoke about how satisfied the one hundred people in her community are. The women do not have to walk so far to defecate and urinate, it doesn't smell bad, and taking care of their waste boosts the community's self-esteem. She received lots of appreciative applause. Two women who share a house in the US set a goal: "Off the sewage grid by 2000!"

WATER RITUALS

Women gathered more slowly for the water circles, as if they had to be especially invited — since they had no idea what a water circle was. We began by combining water that women had brought from their home watersheds. Water women seem to know without being told to travel with "their water" to offer to others in water rituals. Each woman bearing water poured it into a basin as she said something about her watershed. The basin holding "our water" was passed around the circle. Women could wash their hands and faces (the weather was often hot), or drop water through their fingers in greeting.

We encouraged people to share water rituals from their own cultures. Women from the Jewish tradition talked about handwashing at Passover and the symbolism of Miriam's well. Those from India explained that when we come to water we should greet it as a living and respected creature. A woman from Zimbabwe told us that the elder women in her culture have specific responsibilities during a drought. They gather by a certain tree close to the river, brew beer and drink it all night. Rain will come very soon. She also related that aunts teach

premenstrual girls how to masturbate in the river. "First the aunts take her into shallow water, then a little deeper. The men love it that we teach the girls this! The girls love it most of all. Everyone has a good time!"

A native American from the Black Hills was concerned about the health of the people on her reservation. "All kinds of strange new diseases that we do not recognize are coming up in our people. I am just now thinking that maybe the cause of our problem could be the water. How could I get it tested?" She said that water is a part of almost all ceremonies of the Black Hills people.

Christians spoke of baptism. An American Buddhist repeated her religious teacher's instruction: "When you drink, pour some from each glass on the ground, that the earth might drink also." People spoke about family rituals of gathering at the water to play and be together, and of the importance of trips to the ocean, river, or lake in family bonding. One woman talked about learning to trust and to swim simultaneously. It was widely agreed that when one needs to find calm or to come back to oneself, going for a walk beside a body of water is the most effective strategy. "What is it about watching water, hearing the sounds of water, feeling it on one's feet that calls to us so strongly?"

We also talked about the nature and wonder of water, that takes the shape of any container, has no boundaries of its own, but gains force through merging with other water. Water yields, yet gathered in mass it is indomitable. We spoke about the power of water flowing through us, carrying us. Finally we sang "Down by the Riverside."

For too long we have asked that water bear our burdens and carry them away from our sight. We ended with the verse, "We're going to care for the waters / down by the riverside." ♡

Fran Peavey is a local and international social-change worker. Her last article for us, "Questions for the Ganges," appeared in WER #86.

The natural world is endlessly fascinating to children. When nature is the center point of the curriculum, writing and mathematics are seen as useful tools for exploring, measuring, and recording observations. This is fun, not work. And it's real, not abstract. Behold the way human beings learn best: vital engagement with something alive and challenging.

Teachers who base the classroom year on their natural surroundings will soon have students ablaze with enthusiasm.

These books are about forests, but your own region, with its parks, gardens, deserts, prairies, mountains, creeks, or marshes, also provides abundant projects and inspiration.

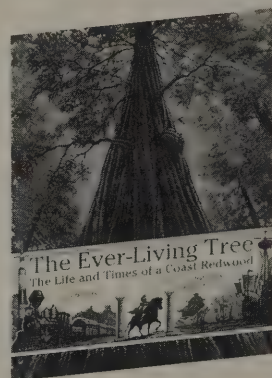
—Karen Van Epen

The Ever-Living Tree

Through spectacular illustrations that successfully convey the colossal size of a redwood, this children's book depicts events in the tree's long life. The authors contrast forest life with contemporary happenings in the far-off world. Fantastic juxtapositions result. A fire rages through the redwoods while nine thousand miles to the southeast, in the ancient African trade center of Kanem, camel caravans bring salt and metalware to trade for ivory and kola nuts. Chipmunks make a burl nest as Marco Polo crosses the icy pass into China. History and natural history in one frame. —KVE

The Ever-Living Tree

(The Life and Times of a Coast Redwood)
Linda Vieira & Christopher Canyon.
1994; 32 pp. ISBN 0-8027-8277-9
\$14.95 (\$18.70 postpaid). Walker Publishing Co., 435 Hudson Street, New York, NY 10014; 800/289-2553



Exploring the Forest with Grandforest Tree

Old Grandforest Tree brings us the world of the woods. His tales of the forest seasons are punctuated with mysteries, songs, celebrations, and indoor and outdoor activities that captivate students, helping them understand how things work and that kids, too, have a place in the ecosystem.

The lucky people in Vermont can call upon the folks at Common Roots to come to their schools and help set up a hands-on, inquiry-based program integrating the themes of food, ecology, and community for kindergarten through sixth grade. One of the guiding principles of Common Roots is to provide children with opportunities to address critical concerns in their neighborhoods and the surrounding region.

Us non-Vermonters don't lose out entirely, because Common Roots publishes a series of guidebooks to take children on seasonal journeys through nature. Other books in the series include *Exploring the Secrets of the Meadow-Thicket* and *The Wonderful World of Wigglers* (about earthworms). —KVE

■ Crawl beneath the sheltering lower branches just like rabbit or fox. Look up and you may notice that Pine's five branches whorl around its central trunk. Some say that Pine grows one whorl every year of its life. Can you estimate how old the Pine tree you have crawled under may be?

● Before you leave the deep part of the forest, stop to look at the leaves of some trees. What shade of green are they? Pick one or two of these leaves, noticing the type and size of the host tree.

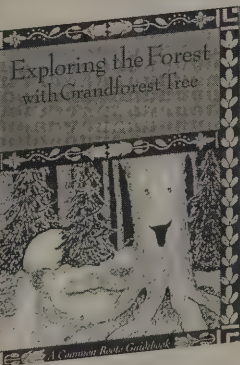
Now find a tree in the sun that is the same size and type as the shaded tree where you picked the leaf specimen. Pick a leaf or two and compare them. Are the leaves the same size? The same color?

■ Tell about the changing cycles of your indoor tree or adopted tree by creating a seasonal "story in the round" with your friends. Pass a twig around from person to person. The twig symbolizes a "talking stick": only the twig-holder may speak. Everyone takes a turn contributing to the story line. The first person begins the story with a sentence or two, then passes the twig to the person on his left. This individual becomes the new storyteller, adding a few lines and passing the twig when he is finished. When the circle is complete, you will have woven together a story-in-the-round.

The Natural History of the

These brilliant pictures are almost as good as a walk through the woods. The fine details of leaf, acorn, and insect leap from the pages of this superbly illustrated children's natural history. It would draw you in even if the text were not informative, but it is. The authors are British, so the species are different, but the similarity of the ecosystems remains. Oaks are shown in all seasons, as well as the birds, butterflies, moths, galls, beetles, spiders, fungi, ferns, and leaf litter that surround the trees. —KVE

In winter, the oakwood seems still and lifeless, with the skeleton-like fingers of the tree branches standing out starkly against the grey skies. But even during the shortest days there is much activity. Bands of tits flit high in the canopy searching the dormant buds and crevices in the bark for larvae and other invertebrates. On mild days, the female Robin proclaims her territory with her winter song. Both the Grey and the Red Squirrels are active even during the coldest weather, busily searching for hoards of acorns and hazelnuts randomly buried earlier in the autumn. A fall of fresh snow reveals the characteristic broad, five-toed imprint of the Badger, while the footprints, or slots, of deer show where a family group has crossed a stream.



Exploring the Forest with Grandforest Tree

JoAnne Dennee & Julia Hand.
Food Works/Common Roots Press, 1994; 262 pp.
ISBN 1-884430-03-1
\$18.95 (\$23.45 postpaid).
Independent Publishers Group, 814 North Franklin Street, Chicago, IL 60610; 800/888-4741

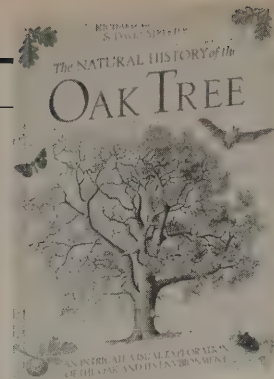
Oak Tree



The Natural History of the Oak Tree

(An Intricate Visual Exploration of the Oak and Its Environment)

Richard Lewington & David Streeter.
Dorling Kindersley, 1993; 60 pp.
ISBN 1-56458-307-4 \$19.95 (\$22.45 postpaid). Houghton Mifflin Co., Mail Order Dept., Wayside Road, Burlington, MA 01803; 800/225-3362



Worms Eat Our Garbage

Name _____ Is That a Fact?

Wormformation
The difference between fact and opinion is what can be proven or not proven. For example, it is a fact that worms have lived up to 5 years in captivity. Someone has observed this to be true. But if a person says, "Worms are my friends," it is his opinion because it can't be proven.

Directions
Read the Wormformation box. Answer which is fact and which is opinion in statements #1 through #6. Place an X in the correct box.

Fact or Opinion

1. Earthworms hide from the light. Fact or Opinion

2. Everyone likes worms. Fact or Opinion

3. All earthworms have red blood. Fact or Opinion

4. Worms feel vibrations in the ground. Fact or Opinion

5. Redworms can be found in piles of horse manure. Fact or Opinion

6. Earthworms are a gardener's best friend. Fact or Opinion

7. Worms are slimy. Fact or Opinion

WORMS EAT OUR GARBAGE Copyright © 1993 Flower Press
50 Comprehension

Here is an excellent way to bring a rather large chunk of the natural world inside, where it can be examined at close range over a long period. The basics of recycling are vividly brought to life when students see worms convert lunch scraps into soil, which subsequently grows vegetables.

Mary Appelhof, the "Worm Woman," has taught thousands of people how to set up and maintain worm composting systems in their homes through her book *Worms Eat My Garbage* (MWEC p.167). This new curriculum uses the classroom worm bin to teach soil science, biology, zoology, solid waste issues, and ecology for grades four through eight and up. Hundreds of worm-related activities in science, mathematics, and language arts demonstrate scientific

methods and problem-solving. This is pretty serious science, painlessly presented.

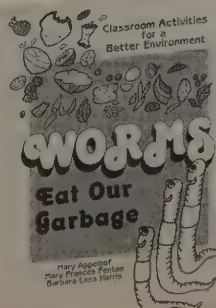
Wiggly critters are intriguing to kids. Teachers who use this unique approach really have their students' attention, like the teacher who makes sure that every classroom science experiment explodes. —KVE

When we humans breathe, our lungs exchange oxygen molecules in the air for carbon dioxide molecules. We exhale (breathe out) less oxygen and more carbon dioxide. This exchange of gases must take place on moist surfaces which are deep within our lungs. These moist surfaces are called membranes. We also exhale water in the form of very small droplets.

Worms respire through their skin. A worm does not have lungs inside its body as we do. However exchange of oxygen and carbon dioxide molecules across a worm's skin is similar to that exchange in our lungs. This is why a worm's skin must be moist to allow it to breathe. If a worm's body dries out, it dies because it cannot respire. [Followed by a lesson on gas exchange.]

Worms Eat Our Garbage

(Classroom Activities for a Better Environment)
Mary Appelhof, Mary Frances Fenton & Barbara Loss Harris.
Flower Press, 1993; 232 pp.
ISBN 0-942256-05-0 \$19.95 (\$21.95 postpaid). Flowerfield Enterprises, 10332 Shaver Road, Kalamazoo, MI 49002; 616/327-0108, fax 616/343-4505



So Shall You Reap

Developments in agriculture have brought about tremendous upheaval in people's lives. This concise and intelligent history traces the bond between human culture and agriculture. Although it concentrates on the Western tradition, from the Fertile Crescent to industrialized farming, crops and techniques from Africa, Asia, and the indigenous Americas are also discussed.

The creation of mega-cities, European colonization, industrial slavery, and the worldwide loss of biodiversity all have their roots in agricultural progress. We need to ponder the course of past events, so we can see at least a few of tomorrow's pitfalls.
—Karen Van Epen

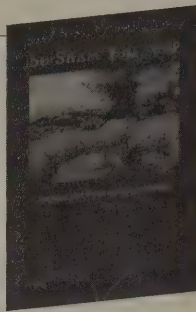
Farming and herding, like so many human inventions, was a mixed blessing. Agriculture enlarged overall production at the possible cost of increased vulnerability of the food supply. Even with today's technology, crops are susceptible to all manner of catastrophe — drought, disease, fire, war, infestation. Although there were calamities in pre-agricultural days, it is unlikely, for example, that a pest would wipe out all the wild plants eaten by a human band. In any event, the band could always move to another place. The great paradox of agriculture is that, while failing to eliminate the principal sources of mortality in hunter-gatherer societies, disease and accident, it introduced a new threat, famine and malnutrition. And because more people could be supported by an agricultural economy, an increased number were subject to these adversities.

Of the twenty most widespread cultivated species, eight belong to the grass family. They include the world's three most important cultivated species, the cereals wheat, rice and maize. The grass family is the fourth largest and the most widespread family of plants. There are between 9,000 and 10,000 species of grasses, about as many kinds as there are of birds. They grow in all types of habitats, from the Arctic to Antarctica, where one of the two species of flowering plants is a grass. Grasses grow in mountains and in forests, but they prefer open space with a lot of light and few trees, such as steppes and savannas. Grasses come in a great diversity of sizes, from giant bamboos to small cushion plants only a few centimeters tall. In spite

of such variations, the basic construction of the grass plant is consistent. One does not have to be a botanist to recognize a grass.

The European elite of the tenth century and later had a penchant for sugar and were willing to pay for it. Thus was the ground laid for a revolution in farming. For the cultivation of sugarcane remade agriculture. No other plant was as influential in

2,500-year-old Greek coin with a figure of an ear of six-rowed barley.



So Shall You Reap

(Farming and Crops in Human Affairs)
Otto T. Solbrig & Dorothy J. Solbrig.
1994; 284 pp.
ISBN 1-55963-308-5
\$27.50 (\$31.75 postpaid). Island Press, Box 7, Covelo, CA 95428; 800/828-1302

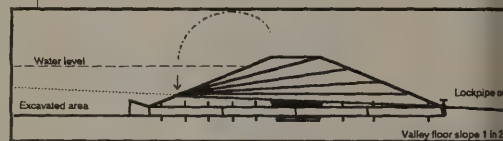
the transformation of farming for food into farming for trade and capital accumulation. No other plant was the cause of so much human suffering. And few plants have been as ecologically destabilizing. Sugarcane drains nutrients from the soil in which it grows. More important, the vast amount of fuel required to process sugar leads to a great deal of deforestation and accompanying soil erosion wherever it is grown, be it the Mediterranean, the Atlantic islands, Brazil, or the Caribbean.

Water for Every Farm

In many arid regions of the globe, the wet season delivers a tremendous, unmanageable downpour which does no one any good later, when it's needed. The idea of the Keyline Plan is to collect and store large quantities of runoff water in the soil and in ponds, and to increase fertility with special tillage techniques and contour-strip plantings of trees. Keyline provides for the design of landscapes, communities and cities, as well as farms. **Water for Every Farm**, a synthesis of several well-respected, long-out-of-print works by the innovative P.A. Yeomans, addresses forestry, revegetation, fire, simple surveying, tillage equipment, land grading, dam building, road excavation, irrigation, biological soil fertility, water harvesting, and more.

In Australia, the system has had a profound, positive effect on land use. Australian agriculture leads the rest of the world in landcare techniques because they hit the wall at the end of the conventional, chemical farming road a little before the rest of us. —KVE

Throughout this second year, the pasture itself had continued to improve at an accelerating rate. Root systems were also



Where to lob an explosive charge to stop dam seepage.

Sell What You Sow • Metrofarm

Times are hard for farmers everywhere. But farms close to a good-sized town are more able to control the marketing and sale of their produce. Selling on the farm, at roadside stands, or at farmers' markets, more money stays in your pocket as you deal directly with your customers. **Sell What You Sow** covers the multitude of marketing possibilities and pitfalls, from research to advertising to zoning and licensing regulations. **Metrofarm** guides you through the complicated decisions involved in setting up and running a small farm near the city. Michael Olson's use of real-person examples is inspiring. If they can do it, so can we. —KVE

Sell What You Sow!

(The Grower's Guide to Successful Produce Marketing)
Eric L. Gibson. 1994; 302 pp.
ISBN 0-9632814-0-2. \$22.50 (\$25 postpaid). New World Publishing, 3085 Sheridan Street, Placerville, CA 95667; 916/622-2248

MetroFarm

(The Guide to Growing for Big Profit on a Small Parcel of Land)
Michael Olson. 1995; 576 pp.
ISBN 0-9637876-0-8. \$29.95 (\$34.95 postpaid). T S Books, PO Box 1244, Santa Cruz, CA 95061; 800/624-BOOK

Sustainable Agriculture

Water for Every Farm

Yeomans Keyline Plan

P. A. Yeomans

Water for Every Farm

(Yeomans Keyline Plan)
P.A. Yeomans. 1954,
1993; 272 pp. ISBN
0-646-12954-6. \$20 (\$24
postpaid). AgAccess, PO
Box 2008, Davis, CA
95617; 916/756-7177,
fax 916/756-7188

deeper and very much thicker everywhere. Many visitors who saw the pasture at the end of the second year believed we would ruin what they then considered good pasture if we cultivated it so drastically again.

The rather spectacular improvement in growth following the apparently destructive cultivation had been seen before. So after the third year the paddocks were again chiseled a little deeper. Throughout the third year the pastures were very good. The rate of recovery from second year chiseling had improved it further.

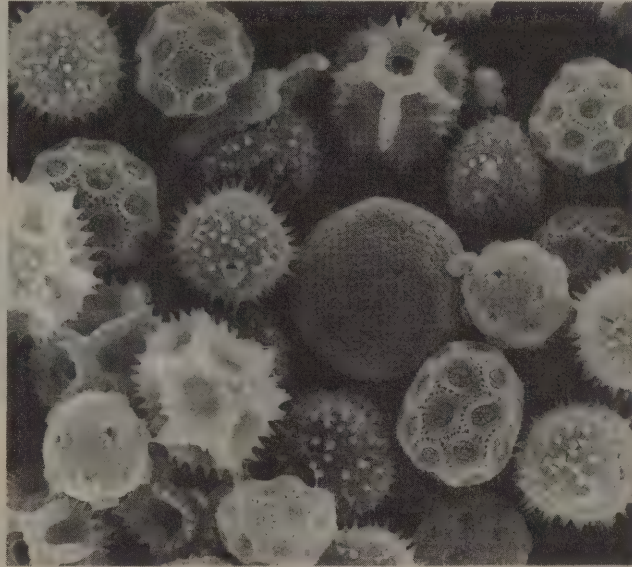
The fourth year pasture was outstanding. The soil everywhere was then dark and teeming with soil life. There were many more small earth worms, and considerable numbers of larger ones.

■ Young trees, planted following proper soil preparation, grow into effective wind breaks much more rapidly than is generally realised. When it is stated that in five years the belt of trees will be an effective sound barrier, wind break, shelter belt or what ever, the impression is often given that from planting time until five years hence, a tree is nothing. But a belt of trees at six months and following only its first growth, is something of beauty and satisfaction, particularly so to the planter and owner.

The Emergence of Agriculture

Like family photo albums hidden away for thousands of years, caves and archeological digs are revealing more about our ancient ancestors than anyone imagined possible. A particularly endearing family trait is the way our aunts and uncles learned to feed us all so well. We are descended from a long line of skilled and observant horticulturists.

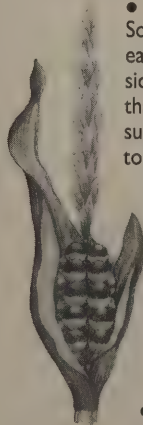
Bruce Smith brings us a vividly illustrated account of the parallel, but regionally unique, development of food crops and human cultures worldwide. He describes clues inadvertently left behind by the old farmers, and new deciphering techniques employed by biologists and archeologists to understand the past. Of special interest is the revelation that most crop plants were developed by people already living in large, affluent, sedentary settlements near rich aquatic resources. —KVE



This scanning electron micrograph shows pollen grains from five different species.

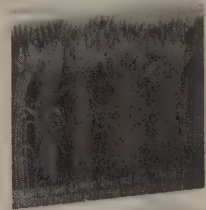
■ From coastal sandbars and marshes up through floodplains, valleys, and foothills, to high mountain deserts, the Kumeyaay had made experimental plantings of a variety of food and medicinal plants. They created groves of wild oaks and pines producing edible nuts at higher elevations and established plantings of high-desert species such as desert palm and mesquite along the coast. They planted agave, yucca, and wild grapes in various micro-habitats. They also planted cuttings of cacti and other succulents near their villages. They carefully burned many of the groves and other plantings of wild species to keep yields high, and by regularly burning off chaparral they improved the browse for deer.

● Some, but not many, of the millions of grains in each year's pollen rain actually fulfill their mission by landing on flowers. Some pollen grains that miss their targets come to rest on the calm surface of a small lake or pond. They soon sink to the bottom, and there become incorporated in the annual sediment layer being formed that year. . . . Because the often distinct shapes of the pollen grains indicate their parent species, the pollen sequences preserved in lakes and ponds record the history of vegetational development and change in the surrounding area.



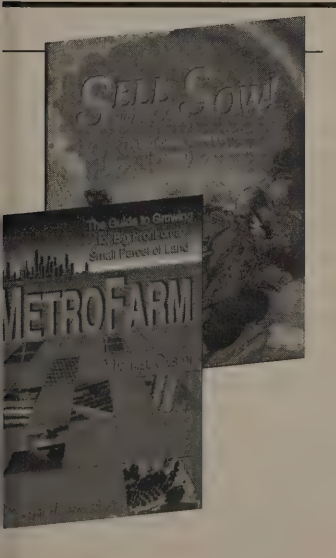
Reconstruction of an early ear of corn from San Marcos Cave in the Tehuacán Valley.

THE EMERGENCE OF AGRICULTURE



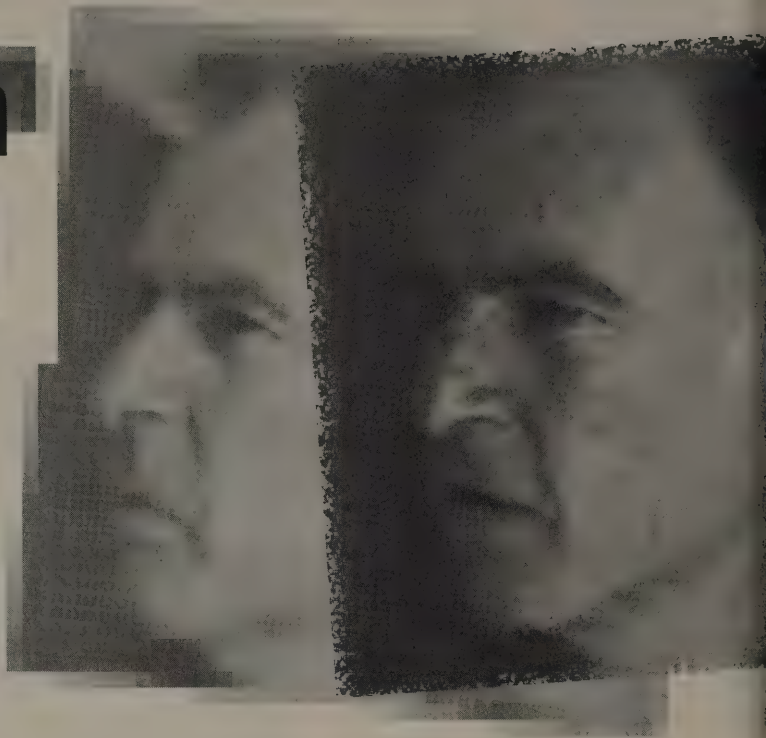
The Emergence of Agriculture

Bruce D. Smith. Scientific American Library, 1994; 231 pp. ISBN 0-7167-5055-4. \$32.95 (\$35.95 postpaid). W.H. Freeman and Co., 4419 West 1980 South Street, Salt Lake City, UT 84104; 800/488-5233



Jerry Brown Committed

AN INTERVIEW BY
DAVID KUPFER

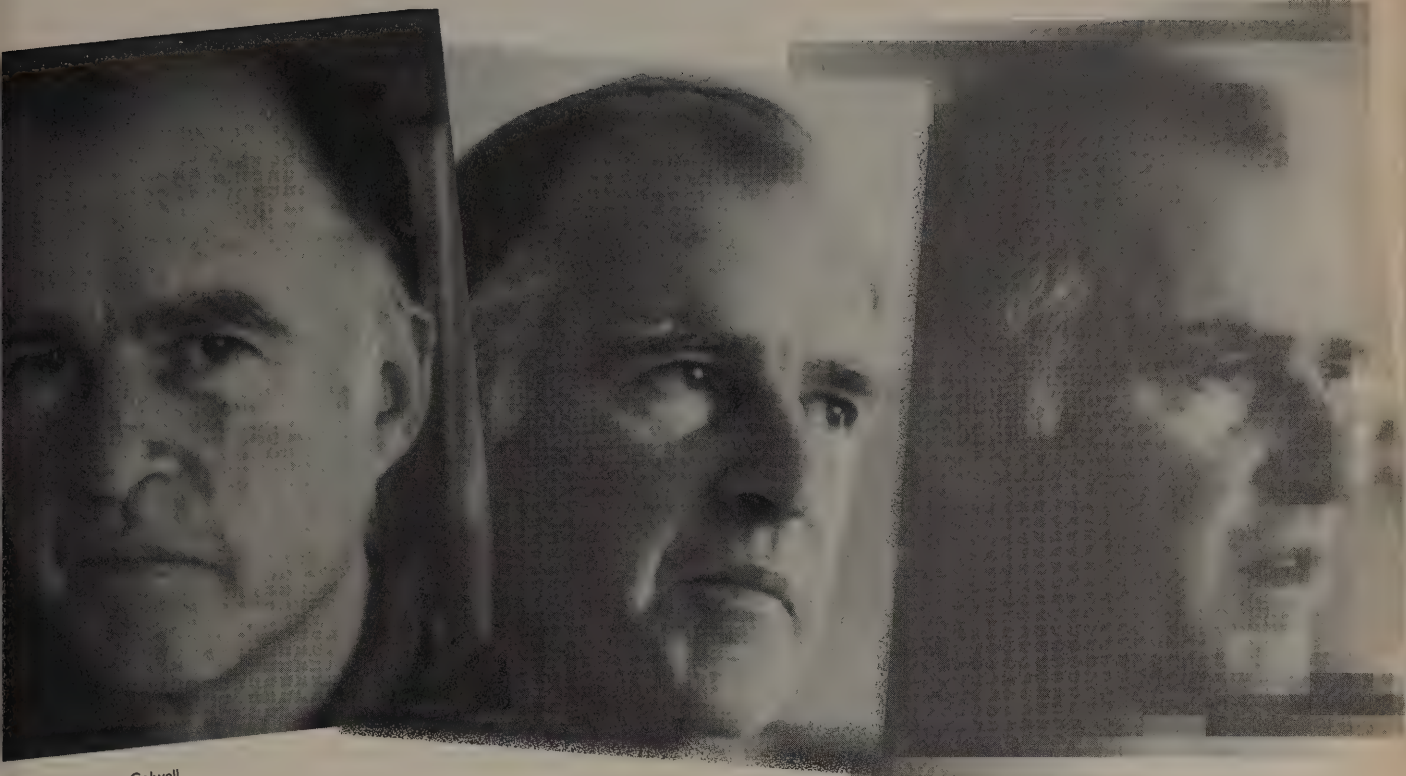


Two-term governor of California (1974-1982), three-time candidate for the US presidency ('76, '80, '92), heretical California Democratic Party chairman, Jerry Brown has gone local. As a radio talk show host on the nonprofit Berkeley, California station KPFA, he holds forth five days a week from his new home, a warehouse complex near the Oakland waterfront. Brown is also organizing self-reliant local enterprises, such as organic community gardens, a food co-op, and a populist legal service. The following interview draws on conversations that took place in Oakland and San Francisco last summer.
—David Kupfer

DAVID KUPFER: What changes have taken place in your view of yourself and your role in society since your governorship? And what has sparked these views?

JERRY BROWN: I would say my views were radically changed by the experience of being party chairman of the California State Democratic Party, raising a couple million dollars by fundraising and presiding over the flow of millions of dollars that the legislators pulled in. I came to see the Party as essentially a money laundry and discount bulk-mailing permit broker for incumbent politicians and Potemkin Village foil for the manipulation of democratic institutions.

Now, I should have undertaken my own revolt right there and led the party away from the incumbents. That was a path I wasn't prepared to go down before I ran for president; maybe it wasn't even possible. The party had contributions from labor interests as well as corporate interests, but there was no extensive grassroots participation and the labor contributions were from individuals at the top. In a real sense the party is an instrument of almost the same class interest as the Republican Party. I know there are distinctions — welfare and endangered species and certain other laws — but when you see what comes out of the congressional meatgrinder, and from Sacramento, the discrepancy between the parties is more apparent than



Winslow Colwell

real. In terms of inequality and environmental destruction, Democrats may slow the drift but they never reverse it.

In many respects, the Gingrich revolution, so-called, is already being reined in by status-quo interests that don't want to see welfare people and poor people driven to the wall, don't want to see middle-class citizens totally alienated. So Clinton is getting a media rebound by calling for higher wages, more compassion toward immigrants, and some kind of modified affirmative action. All those are rhetorical flourishes, but they're propelling Clinton forward and balancing the excesses of the cavepersons of Congress.

Clinton's legacy is Bush's legacy: NAFTA, GATT, the anti-terrorism bill, the federal crime bill, the refusal to even suggest raising the minimum wage in his first two years in office, when he could have done something about it with his Democratic majority. More moderate Republicanism, in the guise of Clinton and Democratic Leadership Council-type politics, has been reinvigorated by system maintenance tendencies. In other words, this system has its own gyroscope, it won't let anything get too far to the right or left.

Clinton is performing (as a sixties radical would have said) a co-optation function the likes of which we've never seen before. Because the distinction between the name of the thing and the thing itself has completely broken down, Clinton, by giving a little gristle, gives many people the

impression that they're getting red meat. They're getting nothing of the kind, and if in fact he beats the dreaded Gingrich, we will be back to Bush. We'll have the Bush third term, and we may get Bush IV.

That's why I am searching for an alternative conception of power, an alternative politics. My old political science teacher, Sheldon Wolin, is a very careful theorist of American politics. He says there now are only two concepts of power: one based on the market and the other on Marx.

The market is grinding people under. It knows no restraints. The welfare state, social democracy, the New Deal, the Great Society, were efforts to balance the power of the market with compassion, participation, egalitarianism. Since those ideas are dead right now, the imperative is to create neighborhood activism, linked with national activism, to challenge what is going to be, sooner rather than later, an obviously bankrupt political state.

DK: What's the "theater of illusion" that you refer to on the radio?

JB: Washington. They're doing some real things — like taking away civil rights, cuts in welfare — but most of what goes on is illusion. Presidential approval ratings go up after 168 people are killed in Oklahoma City. Is that real? The system is rewarding things that shouldn't be rewarded. There's no democratic reason why the President's

"popularity" should go up. That is perverse. That it is even measured is perverse.

The fact that we have a system that can reward burning the Reichstag means we are in trouble. The Oklahoma City bombing happens: Clinton gets more power. The FBI and other federal police agencies get a thousand more agents and new powers of surveillance and infiltration. If someone were inclined to hire a few bombers, he could precipitate an authoritarian response that could kill democratic freedoms with more so-called anti-terrorist laws.

DK: You seem to be more radical since you ran for President.

JB: I see more of what is going on. Clinton orders Tomahawk missiles to kill people in Baghdad and the political and media chorus applauds. By what law were the lives of those Iraqi human beings snuffed out? Nor was any moral or legal test applied to Bush's arrest of Noriega at the cost of hundreds of lives — innocent civilians were murdered by executive fiat. Then there is the turning of children into fodder for our voracious prison system. Clinton even puts ads on television advertising his desire for human execution.

DK: What's your assessment of where America is at this point in history?

JB: The economy's chugging along, there's all sorts of potential out there; yet we face a profound human-relations problem: how do we get along with people that are different, and how do we make sure that the pie is cut up in a democratically tolerable way?

Nobody says, "How is every kid in the third grade doing?" And "In the next twelve months we will make sure that the potential of these children will be realized consistent with a six-trillion-dollar economy in a society dedicated to real equality." That's not happening. Not under Bush, not under Clinton — it wouldn't happen under anybody, because of the media's celebration of what C. Wright Mills called "crackpot realism." It's almost like a mass hysteria: people think, "Oh, we're working on something. We're gonna stop the Contract on America." But it's all theater: camouflage for this market engine that grinds up everything in its way.

DK: You've said that cities no longer count in America. Why?

JB: Three years ago, during the New York primary, Bill Clinton and I had a debate in the presence of the entire national media, Mayor Dinkins, and several other mayors. Clinton and I both committed ourselves to the seven-point

The welfare state, social democracy, the New Deal, the Great Society, were efforts to balance the power of the market with compassion, participation, egalitarianism. Since those ideas are dead, the imperative is to create neighborhood activism, linked with national neighborhood activism, to challenge what is going to be an obviously bankrupt political state.

urban agenda put forth by the National Conference of Mayors. It would have required about a thirty-five-billion-dollar investment in cities. As soon as Bill Clinton was elected — well, not even as soon as he was elected, during the fall campaign — it was never mentioned. After he was elected it was never mentioned. I don't think I've ever seen any mention of it in the national press. What that means to me is that a serious commitment, made before at least fifteen television cameras and the newspapers of record — the *New York Times*, the *Washington Post* — and the Associated Press, counts for nothing. It's meaningless.

And it can only be mean-

ingless because cities don't count, except as feeder systems for the lucrative crime control industry. They are not like the capital-gains tax reduction, they're not like immigrants or welfare or the other hot-button issues that have become the red meat of degenerative politics.

DK: What are the specific goals of the community development efforts you're initiating?

JB: We start from the premise that cities are being abandoned, by the President, the governor, the mayors, in direct contradiction to their rhetoric of concern. This follows from the rules of global competition and technological inefficiency and market hegemony. Those fixations are in the driver's seat, and any notion of conventional politicians mobilizing powerless people, particularly people of color, is, forget it, it's not gonna happen. We have a moral and human crisis of the greatest dimension and it just doesn't register in the theater of politics.

That being the case, I decided to move to an urban area. I decided on Oakland because it was close to where I was born, and I had recently been living in San Francisco. And I didn't want to become another lobbying group, to fruitlessly beg congresspersons, local city councilpersons, and whoever else to do something, but to start some small projects: a We the People law firm, an organic food co-op, a market garden to employ young people, a computer training center to help people to get the skills they need. To be an active presence in the neighborhood first, then expanding to the city and the surrounding area. And through the radio show, to give voice to what people

are experiencing — both the horrors and the heroic efforts that individuals are making that can serve as example and inspiration to the rest of us.

DK: What is a good leader?

JB: Someone who understands other people, who has a sense of their strengths, their weaknesses, what they care about, what they need, what they can do, and who can put that understanding to work in getting a group of people to do things together. It could be a small group, it could be hundreds of people. The basic ingredient is being able to provide example and direction to different people with differing skills and getting them all to work in support of what they have come together to accomplish.

DK: Do you consider yourself a transformational politician?

JB: In the sense that I don't want to just manage or prop up the status quo, yes. It needs to be profoundly shaken up — transformed. In the sense of reform and change, transformation is certainly an objective of my work.

DK: Who do you respect in politics today?

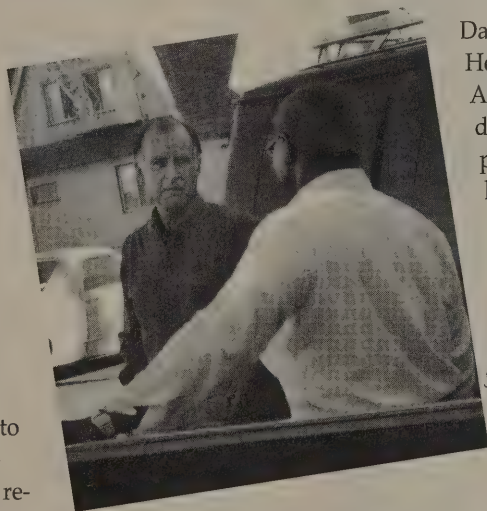
JB: No one comes to mind, and the reason is that the incentives, the money, the soundbites, the need to look good and to find scapegoats in one form or another are all conducive to a degenerate kind of leadership. That's why the natural selection process is not bringing out leaders of the sort this country's founders anticipated — people of virtue, of knowledge, of deliberation.



David Kupfer

We start from the premise that cities are being abandoned, by the President, the governor, the mayors, in direct contradiction to their rhetoric of concern.

You can't challenge the assumptions that are running the country because you can't discuss those assumptions in sound bites.



David Kupfer

DK: Do you consider yourself a leader?

JB: I'm working with other people to change the conditions that presently determine the way society and politics work. That's my commitment, that's the context in which I work; that's a form of leadership. But I'm not satisfied.

DK: What's the connection between the radio show and your political ambitions?

JB: There's no connection other than that I'm a person who's been in politics, I like politics, it's part of my being. So you could say there's a connection to everything I do. But the radio show is primarily a forum, a voice, and a way to broadcast what is done concretely in the local community.

DK: What's been your experience doing talk radio?

JB: For the last year and a half, I was broadcasting via satellite to commercial stations in about twenty-five states. In August, *We The People* began originating from KPFA in Berkeley each weekday at four p.m. Soon it will be on WBAI in New York City. I hope it will be picked up by public radio stations throughout the country. Unlike my national commercial program, it's fifty-seven minutes that are virtually uninterrupted. That in itself is revolutionary.

Daniel Ellsberg spoke with me on the show. He talked for over forty minutes — about the A-bomb: why it was dropped, the fact that debate whether or not to drop it never took place at the higher levels of government, how that gave rise to the runaway arms race. He gave a provocative, thoughtful uncovering, from a very important point of view, of our history in the last fifty years.

That is not permitted on AM radio.

It's not permitted on television. It's not permitted on McNeill-Lehrer. At most, McNeill-Lehrer will allot six minutes — maybe eight or nine minutes like they did for the release of

that software program, Windows 95.

This means, of course, that you can't challenge the assumptions that are running the country because you can't discuss those assumptions in sound bites. This is something Noam Chomsky has pointed out very well: that it takes more than a brief response to reframe the context that is controlling. And if you don't reframe that context you just continue it.

So this radio show is an opportunity to discuss such diverse topics as Waco, the nuclear arms race, the state of

labor, whatever the subject may be, and to get into it in a fresh way. That kind of conversation is crucial to a revived democratic system.

The show allows me to study things I normally wouldn't get into, and to put people on the air who have something to say. I've done shows, for example, with Jennifer Harbury, Bill Kunstler (now deceased), and the Michigan Militia, and shows on the lasting damage air pollution does to human health, on toxic-waste incinerators, on the "natural" rate of unemployment, on the medical propaganda behind mammograms and prostate screening. I include a wide spectrum of people and topics that go against the grain, and I like that.

DK: You frequently sound angry on the radio.

JB: Not really. Usually people say I sound angry when I am attacking their sacred cows. Radio is a nonvisual medium; you have to communicate feeling. When injustices are the topic, indignation is called for.

I had former HEW secretary Joseph Califano on the show. He said that illegal drugs caused 10 percent of the damage of alcohol and tobacco. When you find out that the cigarette companies are hooking kids and turning them into lifelong addicts and causing unspeakable suffering to hundreds of thousands, you know something is evil in the system. And then I think of the government subsidies and the campaign donations from the tobacco lobby, and I see a world that I have to change.

DK: Your new warehouse complex is the focal point of your work.

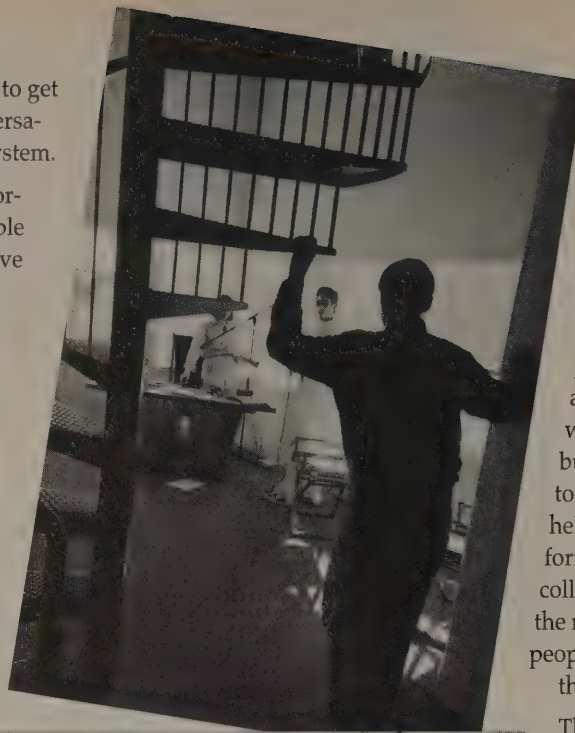
JB: Yes.

DK: And We The People is the organization that grew out of your presidential campaign.

JB: Yes.

DK: And its principal function now is . . .

JB: . . . to speak truth to power, to become engaged in the life of Oakland. And out of that context, to speak to people, and engage others in the conversation of self-governance. So we are focused in the neighbor-



David Kupfer

hood, and the issues are justice and sustainability.

DK: What sort of role or purpose do you see for the live-work center you've created in Oakland?

JB: Its purpose is to be a community of people who are committed to building community — to working together, helping each other transform their own lives, to collaborate in service to the neighborhood and its people. And to be part of the larger community.



David Kupfer

The building is almost like a village, with private rooms upstairs, common space downstairs, a common kitchen, offices, and a large auditorium for community meetings. What I'm trying to do is restore village life in a postmodern age. In one sense it's trying to go back two hundred years, but in another sense it's trying to advance to where we'll be in a

hundred years, with ten billion people on the planet — frugal, elegant, and creative.

DK: The aim of the public-interest law firm you spoke of?

JB: The public-interest law firm will provide low-income people with legal assistance, and pursue public-impact cases where malfeasance or violations of the public's rights are at stake.

DK: You're talking on the radio lately about the revolution of self. Revolutionary change; we need to have revolutionary change. What do you mean by that?

JB: Revolution means to turn. It means conversion, transforma-

(Top) Jerry Brown's daily radio program originates in an Oakland warehouse.

"For the last year and a half, I was broadcasting via satellite to commercial stations in about twenty-five states. In August, We The People began originating from KPFA in Berkeley each weekday at four pm PST and WBAI in New York City."

(Above) The communal kitchen. **"What I'm trying to do is restore village life in a postmodern age."**

tion, extending yourself, expanding your awareness, becoming as skilled as you possibly can, becoming wise.

The market has invaded the deeper parts of our consciousness and has become the "closet dictator." That is the tyranny to be overthrown.

DK: How has your Jesuit training helped you?

JB: It gave me a sense of history. St. Ignatius taught to "abhor wholly and not in part whatsoever the world loved and embraced." That's a powerful methodology.

The ascetic discipline I practiced, following the regime of a Jesuit seminary — silence, meditation, prayer, cleaning toilets, studying Latin and Greek, church history, Jesuit history, ancient history — gave me a classical perspective and an abiding skepticism of worldly values.

The precondition to finding God or your inmost self is to free yourself from "addictions," your attachments. Inordinate attachment means you crave, you are dependent on some material thing or idea or ideology that distorts your capacity for wisdom. Seeing clearly is profoundly difficult because the mental lens through which we see edits what we perceive. That's what Gregory Bateson talked about. We are not conscious of the editing. Spiritual practices, if properly understood, are ways of clearing the lens. Action follows, because action and consciousness are linked.

DK: How can we influence or control the transnational corporations that have gained so much power?

JB: By creating conditions of sustainability, work and craft not dependent on a multinational system. By that I mean cooperative work, making things locally. If we're going to have a democracy, we must return power to where people can exercise control. Politicians today operate on a short leash held by the multinational corporate structure. There has to be a countervailing source of power based on local production, local organization, networked across the whole country, if not around the world. I believe we have to look into our collective condition and correctly label the governmental and corporate behaviors that we see. We have to ask ourselves: "Does this square with what we know to be right?" We can look to the Bible, we can look to our experience. How do we treat friends? How do we treat our family members? Is this the standard that we're

Revolution means to turn. It means conversion, transformation, extending yourself, expanding your awareness, becoming as skilled as you possibly can, becoming wise. The market has invaded the deeper parts of our consciousness and has become the "closet dictator." That is the tyranny to be overthrown.

seeing applied by corporate management, by the United States government, by state government? If a different standard is being applied, is it justified? That's the analysis that's missing. And if we don't do that in some collective way, we're going to see the country continue to move in a fascistic direction.

DK: What are you optimistic about these days?

JB: *[long pause]* I'm optimistic about the fact that there's room for change. People can do things now because they know the emperor has no clothes. It won't be long before a whole new set of eruptions and movements happen. People are just about fed up with the nonsense.

DK: What's your purpose in life?

JB: Certainly, the attainment of greater awareness and understanding, to grasp more clearly and deeply what it is to be a human being, and therefore the connectedness of beings.

DK: And in terms of asking Jerry Brown what the future is for him?

JB: One has to be solid in the place where one is working. ♡

During Jerry Brown's very unusual tenure as California governor, some very unusual conversations took place in his Sacramento office. His visitors included Gregory Bateson, Ken Kesey, Dr. Thomas Szasz, Amory Lovins, Herman Kahn, Orville Schell, Stewart Brand — not the sort of company I can easily imagine talking turkey in, say, Bill Clinton's old office in Little Rock. CoEvolution Quarterly (Whole Earth Review's venerable parent) published transcriptions of some of these talks. They are no less fascinating (maybe more) for being nearly old enough to vote. And the issues in which they appeared can still be had. —James Donnelly

CQ #7 (Fall 1975): Gregory Bateson, Edmund G. Brown, Jr., Jacques Barzagli, Stewart Brand. Out of print but available as a bound photocopy: \$35.

CQ #9 (Spring 1976): Bateson and Brown. Bound photocopy, \$35.

CQ #13 (Spring 1977): Brown, Brand, Herman Kahn, Amory Lovins. A whopper of a conversation (32 pages). It's an endangered issue (fewer than thirty copies remain): \$50.

CQ #17 (Spring 1978): "Governor Brown at the Mental Hospitals," by Orville Schell; "Cops Without Guns," an address by Ken Kesey in the California Governor's Council Room. \$10.

CQ #18 (Summer 1978): Thomas Szasz, Brown, Brand, Dr. Lou Simpson. \$10.

Barrel Fever

Here are images and blasphemies that nice people, and even Oprah and Phil, don't dare look at — fleshed out and told with the lucid, casual voice of intimate knowledge. Stories of cheery Christmas letters featuring infanticide, of the Gay and Famous (Charlton Heston and Elizabeth Dole, for example), of siblings named Hope, Joy, Faith, Charity, and Adolph, of alcoholics and chain smokers you can laugh with . . . Is this parody? It is.

David Sedaris writes essays about his own experiences; other, fictional stories in *Barrel Fever* are the kind of surreal nightmares that are the more chilling because the author could probably have found these people and situations in Anytown, USA. This collection is uplifting, nasty, sweet, and frightening, but at the heart of Sedaris's storytelling is humor born of compassion.

A bonus: Sedaris is a gay humorist, and what he gives us in these pages is not politics as humor, but a refreshing, enlightening, and hysterically funny switch from the same old set of assumptions. —Allison Levin

I am in this week's *People* magazine celebrating my love with Charlton Heston. There are pictures of me tossing a pillow into his face, pretending to be caught during a playful spat. You know that we can be real with one another because on the next page there I am standing on tip-toe planting a big kiss on his neck while Burgess Meredith, Bobby Packwood, and some other old queens are standing and applauding in the background. Then I'm in the kitchen flipping pancakes to show I'm capable. I'm walking down the street with Charlton Heston, and then I'm staring out to sea, digging my bare toes deep into the sand, in this week's *People* magazine.

The Merriest of Christmas Seasons from the entire Dunbar family: Clifford, Jocelyn, Kevin, Jacki, Kyle, and Khe Sahn!!!!

Some of you are probably reading this and scratching your heads over the name "Khe Sahn." "That certainly doesn't fit with the rest of the family names," you're saying to yourself. . . . To those of you who live in a cave and haven't heard the news, allow us to introduce Khe Sahn Dunbar who, at the age of twenty-two, happens to be the newest member of our family.

Surprised?

JOIN THE CLUB!!!!!!

It appears that Clifford, husband of yours truly and father to our three natural

children, accidentally planted the seeds for Khe Sahn twenty-two years ago during his stint in . . . where else?

VIETNAM!!!!

The overall cutest elf is a fellow from Queens named Snowball. Snowball tends to ham it up with the children, sometimes literally tumbling down the path to Santa's house. I tend to frown on that sort of behavior but Snowball is hands down adorable — you want to put him in your pocket. Yesterday we worked together as Santa Elves and I became excited when he started saying things like, "I'd follow you to Santa's house any day, Crumpet."

It made me dizzy, this flirtation.

By mid-afternoon I was running into walls. At the end of our shift we were in the

Barrel Fever

(Stories and Essays)

David Sedaris. Back Bay Books, 1994; 196 pp. ISBN 0-316-77942-3 \$9.95 (\$12.45 postpaid). Little, Brown and Co., Order Dept., 200 West Street, Waltham, MA 02154; 800/343-9204

bathroom, changing clothes, when suddenly we were surrounded by three Santas and five other elves — all of them were guys that Snowball had been flirting with.

Snowball just leads elves on, elves and Santas. He is playing a dangerous game.

City Arts and Lectures

You can read David Sedaris and chortle madly, but even better is just to sit there giggling 'til it hurts while he reads his work to you. A commentator on National Public Radio's "Morning Edition," and by his own admission an "insatiable ham," Sedaris is as good a performer as writer. Hearing him tell a couple of his stories helped me plug his intonations into my own brain's voice (and sensibilities), to wondrous effect.

City Arts and Lectures records great speakers and writers telling their own stories, their own way. This selection features Sedaris's "Steve's Homophobic Newsletter" and Bailey White's "Nursery." Such a treat. —Allison Levin

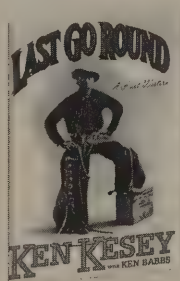
David Sedaris & Bailey White

(City Arts Broadcast)

\$10.99 (\$15.49 postpaid). Pacific Vista Productions, 101 H Street, Suite D, Petaluma, CA 94952; 800/595-8255, fax 707/765-0132

Last Go Round

Ken Kesey has once again stepped out of his norm, if his norm can be defined. His latest is so much fun I forgot that, as a rule, I don't like westerns. Loosely based on the first World Championship



Last Go Round

(A Real Western)

Ken Kesey & Ken Babbs. Penguin Books, 1994; 256 pp. ISBN 0-14-017667-5 \$10.95 (\$12.95 postpaid). Penguin USA, Consumer Sales, 120 Woodbine Street, Bergenfield, NJ 07621; 800/253-6476

Broncbusting title at the Pendleton (Oregon) Round Up in 1911, the plot is simple: who will win the title? The complication is that it comes down to three men — black cowboy George Fletcher, Indian cowboy Jackson Sundown, and 17-year-old Jonathan E. Lee Spain — and we like them all. Hang on tight. —Meg Clark

It didn't take me long to appreciate what a rare pair had sailed into my life. Even the most naive of eyes could see that these were a couple of real old-time dime-western ripsnorters. The black cowboy was the smaller of the pair but he made up for it with his mouth: it was bright as the moon dancing in the stars over his shoulder. He introduced himself as Mister Fletcher but just call him George, and his taciturn partner as Mister Jackson. "You can call him Sun Gone Jack Down or Dog Gone Sun Jack or anything thereabouts — Injun names're always changing."



Ten Commandments for Planners

BY JOEL GARREAU

WHENEVER YOU SEE A PHOTOGRAPH of an American state governor, it seems there is always somebody whispering in his or her ear who remains unidentified. Often, that person is a member of an organization called the Council of Governors' Policy Advisors.

The name for this small but powerful group is a relatively recent one. Back in the sixties, members called themselves a "council of planners." Then they noted that many planners among them had been fired. So the name no longer fit.

Recently, they became curious as to why this was. So they asked me out to San Francisco to talk about "Where Planners Went Wrong."

When I got this call, I smiled. There is a God, I thought to myself, and She does have a sense of humor. I've been very hard on public planners for not seeing the computer revolution coming, not seeing the feminist revolution coming, not seeing the environmental revolution coming, and not seeing that more people in America today own a small business than hold a union card. Most important, they didn't see how these forces would create a brand-new form of twenty-first-century city — Edge City. As a result, the landscape you see around you was almost totally unanticipated and largely unshaped by "planners" — the alleged guardians of the built environment.

I'd been waiting for an opportunity to unload my peeves about planners, and I'd been patient. So given the opportunity to speak, I came up with "Ten Commandments for Future Planners." An abbreviated version follows.

This talk might as easily have been titled "Ten Commandments for Environmentalists," because it grew out of the author's conversion from a knee-jerk environmentalist into a reluctant admirer of the pragmatism of America's new "edge cities" out on the beltways. He chronicled that phenomenon in his 1991 Edge City: Life on the New Frontier (WER 73:52), a book that taught me more about contemporary America than any I've read in years. (That's because I hadn't read Joel's earlier book, The Nine Nations of North America.) A Washington Post journalist for twenty years now, Joel lives with his family on a Virginia homestead straight out of the early Whole Earth Catalogs.

—Stewart Brand

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I **Don't Design Your Plans Around a Better Class of Human Beings Than Actually Exists in Nature.**

Please don't draw up plans that will only work on days that donkeys fly or, for example, when Americans suddenly decide they are willing to routinely walk in the rain and the snow for significant distances rather than stay inside or use their car. Such plans don't do you or anybody else any good.

The American people are the most educated and highly traveled civilization in history. They are about as good as humans get. Only make plans that you have proof they actually *will* use. Don't tell them what they *should* do. They're not fools, and unless it's in their interest, they won't buy it.

MORAL: Planners used to be taught that if they built a "superior" environment, it would create a "superior" class of humans. This was the idea behind the creation of the New Soviet Man. Forget it. It doesn't work. Work with the humans you've got, the way they actually behave.

II **Don't Plan Anything That You Wouldn't Use Yourself.**

The last time most planners were on a bus, it belonged to Hertz and they were on their way to pick up their rent-a-car. That's fine, but please don't make any more designs that will only work if you try to condemn millions of your fellows to a mode of transportation you find too inconvenient and uncomfortable and slow for you to use personally. The same goes for planning hellish densities like those in Mississauga, an Edge City in the Toronto area. It was created by planners who seem interested in building a penal colony for people who refuse to live downtown. Even the penniless immigrants forced to live there hate it.

MORAL: If you wouldn't move your own family into a place you design, there may be something wrong with your scheme. Stop with the paternalistic, top-down, we-know-best view of how people should live unless you are willing to expose your own kids to its consequences.

III **Don't Make Any Plans That Aren't Somehow a Public-Private Partnership.**

That's the combination that works. In transportation, I'm thinking of the British Navy making the Atlantic safe for British commercial interests. Or the transcontinental railroads built by robber barons given huge government real estate subsidies. Or private cars that run on public roads. Or private airlines that land on public airstrips. Or private computer users sending messages on the Internet created by the US Defense Department.

MORAL: Don't waste a whole lot of time on all-public solutions — for example, most mass-transit schemes. Another bad bet is all-private solutions, like for-profit

toll roads. Either method usually works only in highly specific circumstances that are difficult to replicate. They are tail ends of the bell curve. Look for solutions that both the private and public sector will see as sufficiently beneficial that each will sink money into it.

IV **When Trying to Change People's Lives, Go for the Carrot, Not the Stick.**

One of my favorite futurists is Amory Lovins, a MacArthur Foundation "genius grant" winner who has done more to shape the future of energy use in the United States than any other one human being. In the course of conceiving ways to make America more energy-efficient, however, he never *ever* suggests that people suffer. He believes that the bottom line for Americans is "hot showers and cold beer," and spends his time focusing on how those can be achieved with fewer dollars and less energy. Lovins never suggests that we should abandon either dream.

MORAL: Stop beating up on Americans because they find air conditioning and cars to be sensible solutions to complex problems. Start creating future civilizations that are as good at or better than existing technologies in delivering comfort and independence.

V **Automatically Assume That All "Solutions" That Haven't Been Questioned in Fifty Years Are Wrong — Especially the**

Technical Ones. An awful lot of our current problems are created by ideas that seemed wonderful fifty years ago. (This is a constant in history.) I'm thinking specifically of every single dimension mandated in our zoning codes. They call for suburban roads to be twice as wide as they need to be, which allows cars to travel four times as fast as they should, which prevents a tyke on a trike from being safe in her front yard, which defeats the purpose of single-family housing in the first place. I'm also thinking of cul-de-sacs so big you can turn a tractor-trailer or a hook-and-ladder around in them.

Today we know that such blind devotion to car geometry is nuts. We realize the downside — it's a waste of land, a waste of money, and a destroyer of comfortable, soulful neighborhoods that create identity and community. But those damn numbers are still on the books. They must be rooted out and changed.

MORAL: Whatever one thinks of neotraditional town planners like Andres Duany or Peter Calthorpe, they are completely right about one thing: With the benefit of hindsight, it is obvious that we went overboard two generations ago when we designed our world for the car. We've learned a lot in fifty years about complexity. All those numbers created with only one purpose in mind are simpleminded and must be changed.

VI

Don't Put All Your Eggs In One Future.

"Plan A" for the future of America is to pave the planet to accommodate cars.

Everybody knows that's stupid. But the only alternative usually offered, "Plan B," is to return to nineteenth-century rail. This involves forcing people to give up their individualism, and to live in apartments that are convenient to a form of mass transportation that requires thousands of people to want to go from the

same point A to the same point B at the same time, like in Manhattan. This is in defiance of almost a century's worth of practice that shows that if Americans thought Manhattan was such a wonderful idea, they would have built more places like it, and they have not.

MORAL: In a world in which change is rapid and discontinuous,

In a world in which change is rapid and discontinuous, you have to figure out as many solutions as possible and implement as many of them as you can. Don't be satisfied with "Plan A" or "Plan B," especially when neither is wonderful.

you have to figure out as many solutions as possible and implement as many of them as you can. Don't be satisfied with "Plan A" or "Plan B," especially when neither is wonderful. Try to imagine what "Plan C" for the future might look like.

Many of our problems are new ones. Hence, they may not yield either to nineteenth-century solutions (trains) or twentieth-century solutions (cars). The answers may be more modern; they may include making systems smarter by including more software in them. Here's one tiny example that might be part of a software-intensive "Plan C": little pager-like devices for creating instantaneous car pools. People can broadcast where they can be picked up and where they want to go.

VII

Don't Get Hung Up on the Past.

Many planners love Italian hill towns and the Left Bank of Paris because these places feel great to tourists — they seem the epitome of identity, community, civilization and soul. That's great. But please don't try to achieve soul simply by replicating that design. People live differently today. Go for the harder problem: creating civilization in a world in which Americans move, on average, once every eight years.

MORAL: Don't think your plan is wonderful because it looks just like Europe of 200 years ago. That was before

the Industrial Age, before the world went up for grabs. Don't be satisfied until your plan accounts for all the social and technological changes of the last 200 years and still ends up feeling as good as a European — or New England, or Virginia — village of 200 years ago.

VIII

Focus on Results.

Some planners think that a plan that looks good on paper is all that is required of them. After all, they've created a plan, haven't they? So, when that plan turns out to be unbuildable, or unaffordable, or flies in the face of market preferences, they claim the problem is not theirs. They lay blame on the evil forces of, say, capitalism or insufficiently enlightened voters or homebuyers.

MORAL: Pay attention to the feedback you get from ordinary people. If you repeatedly create plans that never get built the way you wanted them to, the problem may not be that of the system or the people: it may be yours.

IX

Plan Not for the Approval of Your Colleagues in Academe, But for the Paying Customers — the Taxpayers.

I'm thinking of the Disney plan for a theme park for Haymarket, Virginia, that was so dumb even Disney finally realized it wasn't worth the trouble. Everybody could have saved a lot of time and trouble if there had been an easier, faster, less contentious way to calculate that it wasn't a worthwhile idea to spend billions of public dollars to create a few thousand \$8-an-hour private jobs in a place that had no unemployment and already commanded very high scenic and historic land values.

MORAL: If you have to spend a lot of academic time on theory, work on this: Come up with some reliable way for the public and private sector to calculate how each benefits from any given scheme.

X

Look for Win-Win Solutions.

Jane Jacobs, the apostle of livable places, author of *The Death and Life of Great American Cities* (1961, Random House), wrote that the point of cities is diversity — the way you can measure a good one is by the thickness of its Yellow Pages: that tells you how many choices you have.

MORAL: What the study of ecology has taught us is that monocultures don't work very well. You don't want to create plans that depend on any one solution for any problem. You want to create solutions with as much diversity as life itself. Learn that all of the land is sacred, the built-on every bit as much as the natural. The day you come up with a planning solution that can be embraced with equal enthusiasm by environmentalists, preservations, bankers and builders is the day you can earn back your distinguished title of "planner." You may also earn back your job. ☺

The Reengineering Alternative

William Schneider, an organizational consultant, wrote this book for executives and managers, but it's mind-opening and relevant reading for the rest of us, too. Read it, then go to your workplace; I guarantee you'll notice telltales of "core culture" all over the place. It may be easy, at first, to pigeonhole your organization as a Control, Collaboration, Competence or Cultivation culture. But how internally consistent is the culture? Is it changing? Is it in balance? Is it helping the organization to succeed, or is it holding it back?

This could have been a very longwinded and brainy tome, given its subject matter. But Schneider is direct and clear in his

The Reengineering Alternative

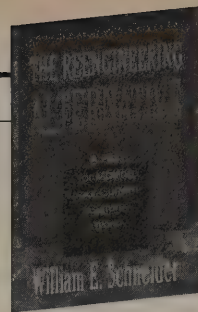
William E. Schneider. 1994; 173 pp. ISBN 0-7863-0120-1 \$30 (\$33.25 postpaid). Irwin Professional Publishing, 1333 Burr Ridge Parkway, Burr Ridge, IL 60521; 800/634-3966

descriptions, using real-life illustrations of his concepts. His central point is merely that organizations should understand the cultures that live within them.

I tend to view gatherings of people as communities where "agreements" grease the social wheels. Agreements assumed and followed out of habit (as among drivers on a busy freeway) make

for basic coexistence. But where agreements are acknowledged by everyone in the community and discussed publicly, the community may actually cooperate and prosper or, if need be, change.

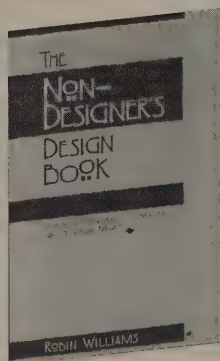
Schneider passes on to us some neat and simple tools for recognizing those agreements within an organization and for putting them to use in achieving the organization's goals. —Cliff Figallo



The Non-Designer's Design Book

Computers and desktop publishing have given us all the ability to mangle words on paper in new and creative ways. Robin Williams's book is a perfect introduction to the basics of design. And, bless her, she spends half of this short book talking about how to use type.

It's short, witty, clear, and actually teaches the subject well. Using good design, even for quotidian things like letters and memos, matters. Now there's a handbook, and you don't need to be a graphics professional to use it. —Ari Davidow



The Non-Designer's Design Book

Robin Williams. 1994; 144 pp. ISBN 1-56609-159-4 \$14.95 (\$18.95 postpaid). Peachpit Press Inc., 2414 6th Street, Berkeley, CA 94710; 800/283-9444

The first tree in the book was the Joshua tree because it took only two clues to identify it. . . . I looked at that picture and said to myself, "Oh, we don't have that kind of tree in Northern California. That is a weird-looking tree. I would know if I saw that tree, and I've never seen one before." So I took my book and went outside. My parents lived in a cul-de-sac of six homes. Four of those homes had Joshua trees in the front yard. . . . And I had never seen one before! Once I was conscious of the tree, once I could name it, I saw it everywhere. Which is exactly my point. Once you can name something, you're conscious of it. You have power over it. You own it. You're in control.

If you peel back the layers of any organization, you will find one of the four core cultures. An organization may have some of the manifestations of other core cultures, but at its center it has just one. More than one core culture in an organization would be too chaotic and confusing for people to tolerate. In the very early beginnings of an organization's life, it may have more than one core culture. But after any meaningful period of time, that organization organizes itself and forms only one core culture. A conglomerate composed of several separate organizations may have several core cultures, but each organization within the conglomerate has its own separate core culture. Some of these separate organizations could have the same core culture, but each is nonetheless a singular core culture.

Control cultures abhor feeling vulnerable. A control culture is always occupied with heading off vulnerability or overcoming any sign of it. Control cultures put great stock in procedures that track the organization's environment for possible areas of weakness; for example, enemy tracking systems for the military and polls for politicians. They also quickly suppress discontent or any signs of disruption; many elementary and secondary school systems operate in this manner. Security has great import in a control culture. Much is done to preserve security and the perception of it. Feeling insecure is, after all, feeling vulnerable.

The key issues concerning organizational effectiveness are the following:
How clear are people about the true nature and strengths of their core culture?
How integrated is that core culture?
How much wholeness or unity has been reached?
How balanced is that core culture?

GALARIA WINE & CHILE FIESTA

NEVER BEFORE IN GALARIA HISTORY

HAS ONE BEEN ABLE TO TASTE 50 GALARIA RESTAURANTS AND 50 INTERNATIONALLY-ACCLAIMED WINERIES AT ONE LOCATION ON ONE DAY. DON'T MISS OUT! JOIN US FOR THE BIG EVENT OF THE 3RD ANNUAL GALARIA WINE & CHILE FIESTA THIS SATURDAY FROM 12 NOON UNTIL 4:30 P.M. AT THE EL DORADO HOTEL. \$35 ADMISSION INCLUDES UNLIMITED TASTINGS, SOUVENIR GLASS & ENTERTAINMENT. PLUS, A PORTION OF THE PROCEEDS TO BENEFIT THE GALARIA FOOD BRIGADE HELPING US FEED OUR HUNGRY NEIGHBORS. ADVANCE TICKETS STILL AVAILABLE AT GALARIA NEWS AND AT OUR PLAZA AMERICADO BOX OFFICE. LIMITED TICKETS WILL ALSO BE AVAILABLE AT THE DOOR.

Never before in Galaria history...

has one been able to taste 50 Galaria restaurants and 50 internationally-acclaimed wineries at one location on one day. Don't miss out!

\$35 admission includes unlimited tastings, souvenir glass, and entertainment.

A portion of the proceeds will benefit the Galaria Food Brigade, helping us feed our hungry neighbors.

3rd Annual Galaria Wine & Chile Fiesta

This Saturday from 12 noon until 4:30 p.m. at the El Dorado Hotel.

I took this ad right out of the newspaper. Really. One of the biggest problems with it (besides being all caps) is that all the information is one big hunk.

Before trying to design with this information, write out the separate pieces of information that belong together; group the elements. You know how to do this—simply use your brain.

Once you have the groups of information, you can play with them on the page.

▲ This is only one of a billion possibilities for arranging the groups of information. I also used the principles of alignment and contrast, which you will be reading about shortly.

But the biggest problem with the original ad is that there is no separation of information. All the text in all caps in one big block also took up all the space, so there was no extra, blank, "white" space to rest your eyes. It's okay to set the type smaller than 12 or 14 point! Really!

YOU'VE EVER BEEN GIVEN BY A

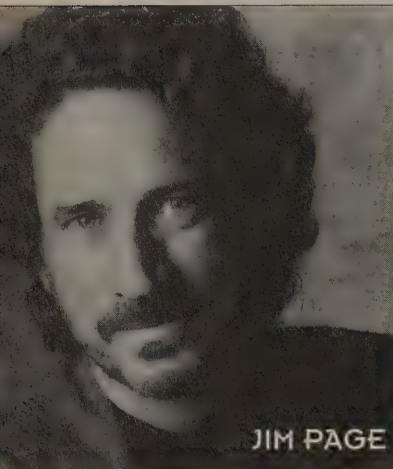
LEADER OR MENTOR IN YOUR LIFE?

Bert de Vries, resource economist, systems scientist at the Netherlands National Institute for Health and the Environment:

Be sincere to your own truth, it is the only truth.
—Indian master Osho Rajneesh

Dr. Alan Kapuler, biological conservationist, founder of Deep Diversity Seed Catalogue, Seeds of Change seedsman:

Don't follow leaders / watch the parking meters.
—Bob Dylan



JIM PAGE

Jim Page, musician, songwriter:
Learn from your own experience and find your own voice. —anon.

Libba Pinchot, writer, co-author of *The Rise of Intelligent Organization*:

Margaret Mead sat down next to me in the front row of an auditorium where E.F. Schumacher was about to speak, and in minutes she had fallen asleep. She was a small woman (this was the last year of her life) dressed in a navy-blue coat that covered her body in the chair so that as she slept, only the short gray hair on top of her head suggested a human.

Schumacher was making a lot of sense and was very appealing. During the question-and-answer period, Margaret continued to sleep, but I began to get agitated by the stupidity of a debunking question asked by an elegant woman in Gucci jeans and high-heeled boots. She was saying that ecological agriculture was unworkable, a laughably naive

Reverend Chumley, Spiritual Leader of the Morally Indigent:

"Up against the wall," from a series of US presidents and other authority figures.

Tom Noddy, aka the Bubble Guy, author of *Bubble Magic*:

Early on, when I started performing, a guy told me: "When you go on stage to perform, never leave cash backstage."

Dennis Peron, activist, Medical Use of Cannabis Legalization; founder of Cannabis Buyers Club, San Francisco:

In 1965, I heard a speech by Robert Kennedy who talked about poor people being hungry and how this country wasn't living up to its dreams. Bobby challenged us to change this country that we loved.



LIBBA PINCHOT

approach to food production. She acted like an authority, the harsh voice of reason. I wanted to speak up to her, but didn't dare. You have to picture me — I was in my fifth year of residence on an ecological agriculture commune, and looked the part, with long hair, clothes from India, not Italy, and hard-muscled. I felt out of place in this crowd of grown-ups in the

Barbara Pyle, vice-president and director of environmental policy, Turner Broadcasting Systems:

When I left home at eighteen to go to college, my father, Charles Y. Pyle of Paul Valley, Oklahoma, advised me: "Always carve away from yourself."

Ram Dass, author, lecturer, spiritual teacher:

Honor your guru, deepen your emptiness, and deepen your compassion. That's all you have to do this lifetime.

When I asked my guru how I could know God, he said, "Feed people." And when I asked him how I could get enlightened he said, "Serve people."

Tarrytown Conference Center housed in the Mary Biddle Duke estate overlooking the Hudson River. I couldn't talk in front of strangers.

As Margaret slept on, the woman argued with Schumacher, and I must have finally gotten

angry enough to mutter something hostile under my breath. From the dark-cloaked lump sleeping next to me an elbow shot out into my ribs, hitting hard, and Margaret Mead hissed in my ear: "Stand up and make yourself heard!" I did, as best I could. I couldn't have done otherwise. I like to remember that elbow in my ribs. I still need it today.

Hazel Henderson, author, columnist, international consultant on alternative development:

Listen to your highest self. I tap into that by the simple Buddhist meditation: "Big Mind — Little Mind." My "mentor," my highest self, is my Big Mind — my universe-conscious self. Little Mind is my locally-expressed, physical/mental/emotional/cultural/social/environmental and spiritual self. The exercise is to keep both of these aspects balanced and integrated into my awareness as much of the time as possible.

Lisa Law

Compiled by David Kupfer

Mark Dowie, investigative reporter, past publisher and editor of *Mother Jones*:

The relationship of the editor to the writer is the relationship of the knife to the throat.

—Paul Jacobs

Tell the truth and run.

—George Selles

Ken Kesey, bus driver, author:

Cassady often said, "If you want to be loved, be lovely."

Dave Lippman, folk singer, troubadour, comedian, activist:

Be yourself. —anon.

Artis the Spoonman,

vaudeville performer, poet, author of *Aspirations to Manifestations from the Womb to the Void*:

Albert Schweitzer said — in response to a question about his thoughts about humanity and its relationship to itself and the world — he said he was "optimistic about the possibilities and pessimistic about the probabilities."



SARA FELDER

Sara Felder, solo theater artist, playwright, juggler:

If you don't change direction, you will probably end up where you are heading.

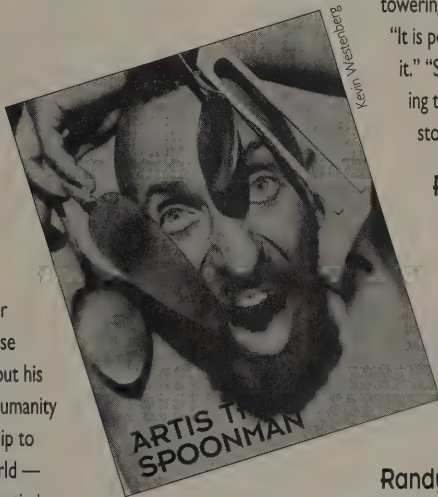
Alan Gussow, artist, art activist, gardener:

I knew and briefly worked for Robert Kennedy. What he modeled for me was redemption, the capacity for authentic, personal change. He was not a very appealing person in his early days — working for Senator Joseph McCarthy, chasing Jimmy Hoffa relentlessly. Yet in his final years he became a public person with a towering moral sense. Although he never said it to me directly, his advice through his actions was "It is possible to change, to release the best that is in you, to really stand for something and act on it." "Satisfaction lies in the effort, not the attainment. Full effort is full victory." "We have nothing to lose except everything. So let's go ahead. If we are to fail, it is better, in any case, to have stood on the side of those who choose life than on the side of those who are destroying."

Paul Winter, musician, activist:

Beware of becoming too good at anything too trivial too soon.

—Bergen Evans, my literature professor at Northwestern University. Over the three decades since then, those words have helped me appreciate the blessings of the challenge, and to realize that failure is life's way of making you go deeper.



ARTIS THE SPOONMAN

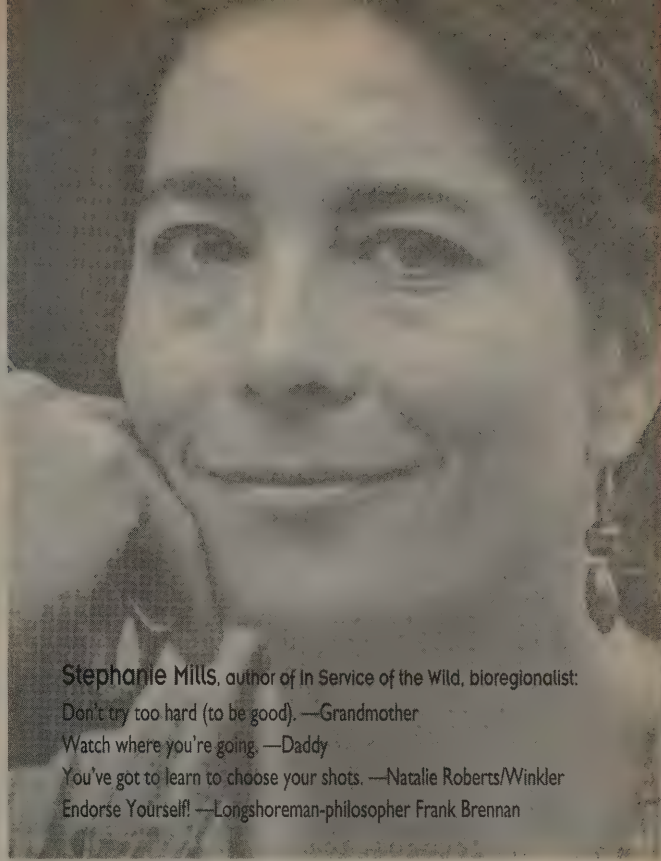
Randy Hayes, environmentalist, director of Rainforest Action Network:

Upon starting RAN ten years ago, Herb Chao Gunther, director of the Public Media Center in San Francisco, told me to do three things:

- Launch an aggressive national media campaign to popularize the rainforest issue in all walks of life
- Jump into the mail both feet first and build a strong activist-oriented membership that would support campaigns and keep RAN from being overly dependent on foundation money
- Build a hard-hitting grassroots army nationwide to fight the fight.

A decade later, we have accomplished those three tasks, defeated a few foundations, saved many forest areas, and are stepping up the campaign to fight and win more fights.

Kristine Dittmer



Stephanie Mills, author of *In Service of the Wild*, bioregionalist:

Don't try too hard (to be good). —Grandmother

Watch where you're going. —Daddy

You've got to learn to choose your shots. —Natalie Roberts/Winkler

Endorse Yourself! —Longshoreman-philosopher Frank Brennan

Cathy Maier



PAUL WINTER

Sally Fox, entomologist, cotton breeder, eco-entrepreneur, owner of Fox Fibre:

In your life you might find something that's your life work. When you find it you'll know it. Stick with it. Don't allow anyone to talk you out of it. Shut out those negative people who would try to talk you out of it or stand in your way.

—Ray Bradbury 🐛

Failure Is Impossible

What a great idea: author Lynn Sherr has taken the back seat to her subject. Instead of mummifying the history of US women's and civil rights movements with pseudo-academic storytelling, what these pages give us is almost all Anthony herself. Sherr simply introduces chapters (whose themes are loosely chronological, following Anthony's life and work), and provides background to quotes, speeches, and interviews.

Failure Is Impossible is a history book with the noble purpose of learning from the past. In particular, political activists and members of disenfranchised groups can open it to any page and find inspiration, comfort, or strategy. That the Beijing Women's Conference has just addressed some of the very issues that Susan B. Anthony (1820-1906) gave life to (and gave her life to), is testimony to this woman's vision and bravery. It also says a lot about the fights that are still to be waged.

—Allison Levin

• The question of precedence has no place on an equal rights platform. The only reason why it ever found a place here was that there were some who insisted that women must stand back and wait until another class should be enfranchised. . . .

If Mr. Douglass had noticed who clapped [for] him when he said "black men first & white women afterwards," he would have seen that they were all men.

■ *The United States of America vs. Susan B. Anthony*

The Prosecution
D.A. Richard Crowley: May it please the Court and Gentlemen of the Jury: . . . The defendant, Miss Susan B. Anthony . . . voted for a representative in the Congress of the United States . . . At that time she was a

Failure Is Impossible

(Susan B. Anthony in Her Own Words)
Lynn Sherr. Times Books, 1995; 384 pp.
ISBN 0-8129-2430-4. \$23 (\$27 postpaid).
Random House, Order Dept., 400 Hahn Road, Westminster, MD 21157;
800/733-3000



Certain Trumpets

I'll bet this is the only book with chapters on Socrates, Carl Stotz (the creator of Little League Baseball), and Cesare Borgia, not to mention Wittgenstein, Nancy Reagan, and Madonna. Garry Wills recognizes that there is no single model of leadership, no universal checklist of leaderly qualities. Different circumstances require different leadership: hugely successful leaders in one setting can be busts in another. Moreover, leadership occurs only when leaders, followers, and shared goals converge.

Wills explicates sixteen types of leadership — radical, diplomatic, intellectual, artistic, saintly — and the men and women who have succeeded (or failed)

■ **Suffrage Monument, US Capitol. Left to right, Elizabeth Cady Stanton, Susan B. Anthony, Lucretia Mott.**

woman. I suppose there will be no question about that . . . whatever Miss Anthony's intentions may have been — whether they were good or otherwise — she did not have a right to vote upon that question, and if she did vote without having a lawful right to vote, then there is no question but what she is guilty of violating a law of the United States. . . . Conceded, that on the 5th day of November, 1872, Miss Susan B. Anthony was a woman.

■ We shall some day be heeded, and when we shall have our amendment to the Constitution of the United States, everybody will think it was always so . . . They have no idea of how every single inch of ground that she stands upon today has been gained by the hard work of some little handful of women of the past.

at each of them. While helping me appreciate the skills, and often luck, which make for leadership, Wills is equally convincing about the need to cultivate the neglected art of followership. —Michael Stone

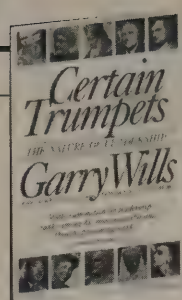
● Though Pius XII was eighty-two and sickly, his death came as a surprise in 1958 When he died at his summer palace, Castel Gondolfo, the customary evisceration was delayed until the body was returned to Rome. As his cortege reached the pope's episcopal seat as bishop of Rome, the Lateran Basilica, a loud boom issued from the casket — it was the pope's body exploding. His personal physician (an ophthalmologist) had used an "experimental" embalmer, who worked to undo the damage that night. But the next day, when Pius's face was exposed, it was green, and the day after that his face developed dark blotches and a rotting odor spread from the casket.

In medieval times all these signs would have proved that the devil had taken possession of the unfortunate cadaver. Even modern

Rome is not entirely proof against superstition. The curial forces that wanted to celebrate Pius as a way of electing a conservative heir to his policies (perhaps Domenico Tardini) were thrown off their stride by these unsettling events. The sense of an ending, the need for a new beginning, made the conclave look for someone outside the tight Roman circle Pius had pulled around him. . . . On the eleventh ballot Roncalli was chosen, as a man of amiable mien, one who could serve as a "transitional pope" until a younger man was groomed for the real leadership of the future.

■ Charisma inspires people, but also exhausts them, with the unexpected. Bureaucracy holds people together on a predictable schedule. One would not want the sun to rise (or not) on a whim, to set (or not) at unforeseeable times. Bureaucracy is as much underrated, as an ordinating principle of life, as charisma is overrated as the source of *real* leadership.

● Not many of us will be leaders; and even those who are leaders must also be followers much of the time. This is the crucial



Certain Trumpets

(The Nature of Leadership)
Garry Wills. 1994. 336 pp.
ISBN 0-684-80138-8
\$14 postpaid. Simon & Schuster,
Order Dept., 200 Old Tappan Road,
Old Tappan, NJ 07675; 800/223-2336

role. Followers judge leaders. Only if the leaders pass that test do they have any impact. The potential followers, if their judgment is poor, have judged themselves. If the leader takes his or her followers to the goal, to great achievements, it is because the followers were capable of that kind of response.

The Leveling Wind

I savored this book by reading a few pages every day. George Will's brief descriptions of fools and charlatans, past and present, are priceless and comprehensive. He is controversial, but so direct, informative, and compelling that I find myself comparing him to Thomas Paine. What a way with words!
—Brandon Chase

■ The Anti-Slavery Society: Still with Work to Do

LONDON — South of the river, in a slightly seedy section of the city, in a down-at-the-heels building that has seen better days but not better uses, the Anti-Slavery Society is still in business, because slavery is, too. Founded in 1839, it is the world's oldest human rights organization. . . .

Today there may be as many, perhaps many more, people in conditions properly denoted as slavery as there were when the Society was founded. So says the Society's director, Lesley Roberts.

She is not one of those flurried people one so often sees in the world of altruism, the kind who perpetually look as though they had risen late and dressed in haste. She has the brisk manner of one who has worked

in banks, which she has done, and she has the restlessness to have been bored by that, which she was. In an office lit only, and dimly, by watery sunlight that struggles through unwashed windows, she enumerates the Society's concerns, beginning with chattel slavery — the total ownership of one person by another. It was officially out-

lawed in the Arabian peninsula less than 20 years ago, and may even be expanding in parts of northern Africa, particularly Sudan.

Far more prevalent, and properly called slavery, is debt bondage, especially of children. Such laborers are bound for payment of debts and are entirely subservient to a power from which there is no appeal. . . .

While sifting abundant evidence of such slavery (and worse — millions of children, male and female, are devoured by Asia's prostitution industry), the Society maintains a remarkable emotional equipoise, advocating piecemeal remedies for absolute evils. For example, it does not favor banning imports of carpets made with coerced labor. It knows that destroying the carpet industry would destroy many lives. An existing industry can be improved.

Publicity, embarrassment, persuasion, organized labor — these are among the remedies required. But the first requirement is the patience of politics, which acquires special dignity in the face of such shattering facts.

Roberts and the Society (180 Brixton Road, SW9 6AT) are echoes of the distinctive moral earnestness that redeemed the 19th century and leaven this one. "I get bored easily," she says. "This is not boring."

June 21, 1990



The Leveling Wind

(Politics, the Culture and Other News, 1990-1994)
George F. Will. Penguin Books, 1994;
496 pp. ISBN 0-14-024702-5
\$12.95 (\$14.95 postpaid). Penguin USA,
Consumer Sales, 120 Woodbine Street,
Bergenfield, NJ 07621; 800/253-6476

FOUCAULTPHOBIA

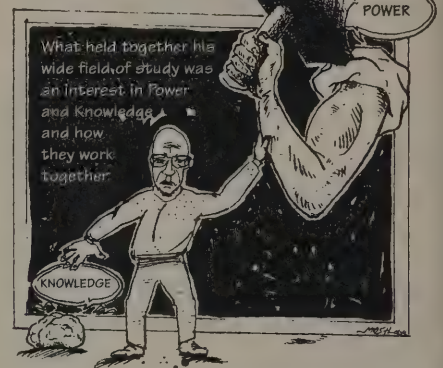
by Andrew Needham

humans are conditioned through discourse: how we talk, how we formulate knowledge, and who we look to for knowledge. No universal certainties exist; justice, sexuality, insanity, morality — all knowledge is a construction of discourse. Foucault is specifically interested in the disciplines and institutions that create expert forms of discourse, and therefore, modern knowledge.

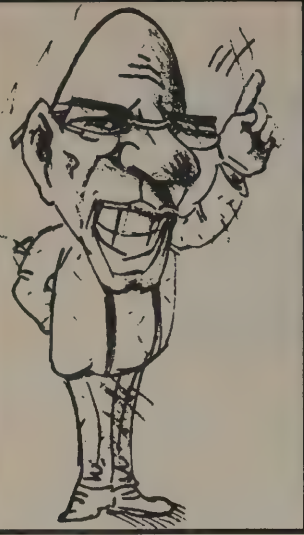
His books focus on subjects like asylums, prisons, sciences, clinics: institutions that create normality. Increasingly, in the era of the scientific and industrial revolutions, these institutions and the experts at their heads became valued for their definition of the normal. Experts created categories of knowledge and controlled the discourse of these categories; medicine arose as expert knowledge of sickness, and doctors were the only people qualified to determine an unwell body. For the first time, unified categories arose to incorporate all measures of differences. Deviants from the defined conditions of normality were no longer allowed to form a part of society (like the village idiot); they were kept apart, in institutions where they could be efficiently observed and known. Foucault demonstrates how this institutional knowledge enters society in new forms of discourse. The "insane" can no longer speak for themselves; they cannot know themselves because of their abnormality. Only the "experts" really know them. Through institutional knowledge, we now talk of ourselves as guilty or innocent, gay or straight, sane or insane.

Discipline and Punish: The Birth of the Prison studies how prisons specifically, but really all institutions of coercion (schools, armies, etc.) developed. Prisons are a relatively recent invention. Earlier measures of punishment demonstrated the sovereign's ability to inflict pain upon transgressors of his laws. For example, Foucault cites the account of a regicide named Damiens who was condemned in 1757. "The flesh will be torn from his breasts, arms, thighs, and calves with red-hot pincers, his right hand burnt with sulfur, and; on those places where the flesh will be torn away, poured molten lead, boiling oil, burning resin, wax and sulfur melted together and then his body drawn and quartered." What Foucault sees in torture is the sovereign's power personally engaged with the

elimination of a transgressor who challenged his laws, his basis of control. Power occurs in one direction in this model; the king exerted his power to eliminate the transgressor and provide an example to the spectators. Pain was a vital part of the public spectacle that reaffirmed the king's power. Just around the time of Damiens' execution, though, an important series of challenges occurred. The crowds became increasingly unruly, sometimes chasing off the executioner and carrying the criminal away in triumph. Faced with this type of disobedience, the sovereign had to respond with ever-increasing displays of power, and the possibility of full rebellion came to hover over every punishment. Clearly, a new solution was needed.



The solution was found in the new methods of production revolutionizing the Western world. The modern prison is an even more complete exercise of power than the spectacle of the gallows. The transition from torture to control as a means of punishment represents a massive shift in systematic uses of power and authority within society. Foucault analyzes the Industrial Revolution in terms of its production of "docile bodies" conditioned to their role in the rapidly technologizing society. Foucault calls this production the science of discipline; its main principles are spatialization, complete control of activity, repetition, detailed hierarchies, and normalizing judgments. All of these combine to create self-reinforcing systems of power and control. Each level looks to the one above it for knowledge or direction. The subject gaze of the lower also controls those above by reinforcing their role as knowledge providers. In this sense,



Michel Foucault is one of those intimidating figures of modern thought: French, bald, confusing, French. He's known as "the most influential philosopher since Sartre," but when I asked my lit-crit friends who said his name like a mantra ("Foo-coe, foo-coe") to explain, they stumbled over themselves, spitting out phrases like "the genealogy of the modern subject," "the subjectivity of the carceral body," and "selves produced in the interpretation of social discourses." After a frightening moment when I considered denouncing them à la William Bennett, I decided that Foucault couldn't be as baffling as my friends.

Foucault is not as difficult as you might intelligently assume. Reading Foucault halfheartedly does not work; to read him requires a willingness to be confused, lost, even helpless at times. It requires that you watch Foucault immerse himself in paradox while dancing lightly over contradiction. However, as French theorists go, he writes beautifully; and because his investigations are overtly political, he writes to the understanding of how we are shaped, molded, constrained. So don't let the skeptics get to you, Foucault is possible, and more importantly, valuable. He has profoundly changed my interpretations of history and language — how they are shaped, and who does the shaping.

Despite the many fields that use his ideas as means of interpretation — linguistics, literature, sociology, political science, and others — Foucault's investigations are historical. Specifically, he interprets changes in the nature of power and knowledge. To provide the briefest of cosmologies, he believes that human nature, instinct, and other intrinsic underpinnings of mankind are not fixed;

power is not simply the control exerted by elites upon the masses but a whole network of interlocking conditions and coercions; power is not directed by elites, flowing top to bottom, but is localized in institutions.

In *The History of Sexuality* (Volume I), Foucault sets out to destroy the concept of our liberation from Victorian repression. Everyone knows the Victorians to have been obsessively concerned with not seeing/talking about/exposing people (especially women) to sex. Then along came Freud, who allowed society to talk about sex and sexuality and inhibition. Gradually, an entire culture developed, involved in liberation through recognizing repression and rejecting it. Great, right? Well, no. Foucault proposes "to examine the case of a society which has been loudly castigating itself for its hypocrisy for more than a century, which speaks verbosely of its own silence, takes great pains to relate in detail the things it does not say, denounces the powers it exercises, and promises to liberate itself from the very laws that have made it function." Foucault finds that the Victorians talked about sex quite a bit; they just talked about it in ways that no one had before. The Victorians constructed an entire scientific discourse around sex. They named it (homosexuality), normalized it (het good, homo bad), institutionalized it (through the study of sexual deviance). The Victorians "discovered" sexuality, a means of power and control over sex.

Now we get to the payoff. Our societal embrace of sexuality and sexual identity makes us very much the heirs of the Victorians. The ideas used by the Victorians to demarcate norms have now become deeply rooted ways to talk about ourselves. In the major controversial claim of the book, Foucault asserts that the Victorians invented homosexuality; single-gender sex was not unknown before the Victorians (remember Socrates) but it was considered just another pleasure, instead of a deviance and later an identity. The conception of sexuality, founded in Victorian methods of surveying, quantifying, and defining sex, is one of the most deeply entrenched power relationships in our society.

Foucault draws criticism for having a view of absolute, unremitting power that allows no possibility of political action.

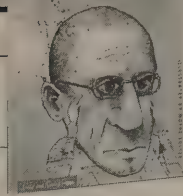
Foucault responded that political resistance to power was necessary; however, he found that organized politics (whether Liberal or Marxist) merely stabilized existing power relationships. Sexual and political play challenged the institutions of power more effectively because of their unpredictability and their subversion and satire of institutional power. "One must put 'in play,' show up, transform, and reverse the systems that order us about."

Several good summaries of Foucault's work and thought are available. *The Foucault Reader* is fine, but what has really helped me is a wonderful book called *Foucault for Beginners*. It takes Foucault away from academic jargon and explicates his biography and work in a delightful mix of cartoons and text. In a sense, it subverts the institution of Foucault, which Michel himself would have appreciated. 🐾

- Does the analysis of sexuality necessarily imply the elision of the body, anatomy, the biological, the functional? To this question, I think we can reply in the negative. In any case, the purpose of the present study is in fact to show how deployments of power are directly connected to the body — to bodies, functions, physiological processes, sensations, and pleasures; far from the body having to be effaced, what is needed is to make it visible through an analysis in which the biological and the historical are not consecutive to one another, as in the evolutionism of the first sociologists, but are bound together in an increasingly complex fashion in accordance with the development of the modern technologies of power that take life as their objective. Hence I do not envisage a "history of mentalities" that would take account of bodies only through the manner in which they have been perceived and given meaning and value; but a "history of bodies" and the manner in which what is most material and most vital in them has been invested. —*The History of Sexuality*

- Delinquency, with the secret agents that it procures, but also with the generalized policing that it authorizes, constitutes a means of perpetual surveillance of the population: an apparatus that makes it possible to supervise, through the delinquents themselves, the whole social field. Delinquency functions as a political observatory. In their turn, the statisticians and the sociologists have made use of it, long after the police. —*Discipline and Punish*

FOUCAULT

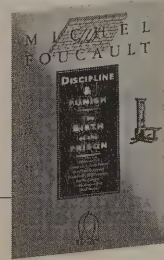
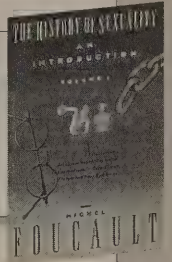


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Lydia Alix Fillingham. 1994; 156 pp. ISBN 0-86316-160-X \$9.95 (\$12.95 postpaid). Writers & Readers Publishing, 625 Broadway, 10th floor, New York, NY 10012; 212/982-3158

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(Volume I: Introduction) Michel Foucault. Vintage Books, 1978; 168 pp. ISBN 0-679-72469-9 \$10 (\$14 postpaid).



Discipline and Punish

(The Birth of the Prison) Michel Foucault. Vintage Books, 1979; 333 pp. ISBN 0-679-75255-2 \$12 (\$16 postpaid).

Both from Random House, Order Dept., 400 Hahn Road, Westminster, MD 21157; 800/733-3000

The Foucault Reader:

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The 1962 Battle Over
Canadian Health Care

LABOR PAINS



BY STEVEN A. LYONS

I WAS LESS THAN sixty seconds into my interview with Dr. Barootes and things were not going well. People familiar with my subject's disposition had warned me to expect a less-than-warm reception. They were optimistic.

Steve Lyons's friend Tricia doesn't have health insurance, but she does have breast cancer. Her options are 1) to spend herself into poverty so she'll be eligible for Medicaid or 2) to forego treatment and die. Steve's wife, a geriatric physician, works with old people of low income who, for one reason or another, don't qualify for Medicare or Medicaid.

—Ruth Kissane

The doctor was immediately suspicious of an American interested in the health policy opinions of a seventy-six-year-old urologist from Saskatchewan. Things turned from bad to worse:

"And what is *your* position on health care reform?" he inquired.

"Well, I'm trying to write an objective article."

"That . . . is . . . *not* . . . what . . . I . . . asked," he growled.

THE LAST US CONGRESS KILLED GOVERNMENT-LED HEALTH CARE reform out of fear that it would interfere with the patient-doctor relationship, increase bureaucratic overhead, limit patients' choice of doctors, and ultimately lead to rationing of health care.

We are spiraling toward the Orwellian form of health care envisioned by Congress. But Big Brother is not the government. Rather, as huge managed-care corporations control larger and larger portions of the health delivery system, profit, not quality patient care, is driving the health care industry. Every fear that the 103rd Congress had of a big government health insurance program is coming true, thanks to big private health insurance companies.

Lawmakers were concerned that the Clinton health care plan would limit our choice of doctors. However, all managed-care programs limit the patient's choice of doctor to providers that are employed by or approved by the insurance company.



One of many demonstrations in protest of the new government health insurance program. Regina, Saskatchewan, July 11, 1962 — ten days into the doctors' strike.

All photos appear courtesy of the Saskatchewan Archives Board.

People attacked the Clinton health plan as increasing government bureaucratic waste. However, in a recent study, the California Medical Association found that California's private health insurers squander eight times more in administrative overhead than the state-run health insurance program. Nationwide, about one of every four dollars is wasted on overhead by the private insurance industry.

The 103rd Congress feared that the Clinton health plan would intrude upon the doctor-patient relationship. But under private health insurance plans, three out of four doctors sign contracts surrendering their medical decisions to insurance company oversight. One large company's managed-care plan prohibits patients from calling their doctors directly. Instead, the employee must call an insurance company representative, who in turn calls the doctor.

People feared that government health insurance would lead to rationing of health care. Now, under private health insurance, hospitals are discharging patients quicker and sicker to save money. With managed-care plans discharging mothers and their newborns as soon as eight hours after birth, legislators have had to intervene to force the insurers to cover at least forty-eight hours of postnatal care.

In 1993, when Representative Jim McDermott and Senator Paul Wellstone proposed a Canadian-style single-payer health care program for the United States, it was considered politically impossible. The proposal never made it to the House floor, even though the Congressional Budget Office estimated the system would save \$175 billion annually by the year 2003, completely eclipsing the savings of any other health reform proposal.

Since managed care is rationing health care, interfering in the relationship between doctors and patients, and burying everyone in paperwork, we might ask

CANADIANS have lived with their version of health care reform since 1962, when **the Canadian government began providing cradle-to-grave health coverage** for all their citizens.

BY 1951 Saskatchewan boasted more hospitals than the much more heavily populated province of Ontario. Yet despite innovations in treatment and coverage, **in 1960 less than half the population had health insurance.**

an innocent question: "Tell us again why we should avoid a single-payer system?"

Canadians have lived with their version of health care reform since 1962, when the Canadian government began providing cradle-to-grave health coverage for all its citizens. On the surface it seems it can't be any worse than the direction our system is headed.

But opponents to the single-payer system contend that Canada rations health care and provides a lower standard of care, all due to its tax-financed health system. I decided to search for the tender underbelly of the Canadian system, to determine who was right.

MY SEARCH FOR the dark side of the Canadian Medicare system (as it is called) quickly led me to one man. If the Canadian system has any shortcomings, Dr. Efstathios W. "Staff" Barootes would be more than happy to expose them. Back in the early 1960s, Barootes vigorously crusaded against the implementation of government-sponsored health insurance in Canada. Canada's single-payer health care system began in Saskatchewan. Barootes was vice president, and later president, of the Saskatchewan College of Physicians and Surgeons, a group determined to prevent any program that involved tax-financed health care for the entire population. He was president of GMS, the doctor-sponsored private medical insurance plan in Saskatchewan. In a 1960 televised health care debate with the premier of Saskatchewan, Barootes argued against the proposed health insurance scheme. In 1962, in an emotionally charged speech to a mass meeting of doctors, he received the loudest applause when he proclaimed that "Never . . . has there been such legislation reversing the civil rights and liberties of citizens." And Barootes served as Saskatchewan's conservative party senator in Ottawa from 1984 until retiring last year. Now, if anyone in Canada could expose the tender underbelly of the Canadian health care system, Dr. Staff Barootes could.

I reached Dr. Barootes by phone at the headquarters of the conservative party in Regina, the capital of the province of Saskatchewan. I had my questions neatly typed up and numbered. After his initial interrogation of me, he launched into a two-hour monologue, making it clear he had little interest in me or my questions. He had a story to tell, and by God, he was going to tell it his way, on his terms.

"Health is a state's right here; it's a provincial responsibility," began Dr. Barootes. "The federal government can only influence provincial programs indirectly, by saying if you follow certain standards that we set, then we will share your health care costs. This is different from the US, where your health programs are national and state governments are administrators of your national programs."

Because health care is the responsibility of each province, it is not surprising that the current Canadian system evolved province by province. Even today, there is no "Canadian" health care system. There are provincial health care systems. However, they all have certain similarities.

Saskatchewan has a long history of health care innovation. At the beginning of this century, when many lives were being lost to tuberculosis, the people of Saskatchewan joined with doctors to form "Anti-Tuberculosis Leagues." With vans roaming the province, Saskatchewan provided free testing, prevention and treatment. Later, Saskatchewan provided free cancer treatment centers. The world's first Betatron unit and the first Cobalt-60 treatments were developed in Saskatchewan.

Saskatchewan is about the size of Texas but has about one-fifteenth its population. Because of its harsh climate (the province is north of Montana and North Dakota), rural isolation, and dependence upon a one-crop, boom-or-bust economy, the

people of Saskatchewan have survived by helping each other through collective and cooperative action. After World War II, this spirit of cooperation was reflected in the conversion of deserted military air fields into air ambulance stations to serve the health needs of isolated rural farmers. Similarly, locally funded community hospitals sprouted up to serve the rural population. By 1951 Saskatchewan boasted more hospitals than the much more heavily populated province of Ontario. Yet despite innovations in treatment and coverage, in 1960 less than half the population had health insurance.

Onto this scene strode Tommy Douglas, the charismatic and colorful premier of Saskatchewan from 1944 to 1962.

"Douglas really should be regarded as the father of health care in Canada, because what he set up was copied by the other provinces," continues Dr. Barootes. "Tommy Douglas was a jaunty Baptist minister who left the ministry for politics. He had osteomyelitis as a young man, and had required many operations on his leg, which were done through the charity of doctors. He was not very well off, he was a Scottish immigrant. He swore all his life that whenever he could, if he ever had the power, he would make health care as available to the people of Canada as education. That was his objective and he never deviated from it."

By the 1960 provincial elections, Douglas was ready to act on his vision of universal, comprehensive, publicly administered health insurance. And the doctors of the province were equally ready to oppose him. Soon the only issue of the campaign was health care reform. But Douglas's party, the Co-operative Commonwealth Federation (CCF) was ultimately victorious, winning thirty-eight of the fifty-four seats in the legislature. Douglas took that as a mandate, and vigorously began to orchestrate his health care plan. This incited the tightly organized doctors to attack the plan with even greater passion. And at the forefront of the fight was Dr. E.W. Barootes.

"At first people were apathetic, it was just another extension of health care services that Mr. Douglas had always preached about, until the doctors got in the game," Barootes recalls. "We had never been in this game before. We were clumsy, awkward, we were highly rhetorical, we used all the antics of bad politicians: exaggeration, dire threats of what might happen.

"Our concern was that once the government took over physician care services . . . we would become technicians or tradesman being paid salaries by only one paymaster."

The opponents to implementation of Saskatchewan's health care system in the early sixties make last year's opposition to Clinton's attempt look tame by comparison. The insurance industry squashed US health care reform last year by exploiting the vision of a coldhearted, government-run bureaucracy. In Saskatchewan, the doctors appealed to a much more basic human instinct: survival.

AS JULY 1, 1962 — the day for implementing the plan — approached, doctors put up large signs in their offices:

TO OUR PATIENTS:

This Office Will Be Closed After July 1st, 1962. We Do Not Intend To Carry On Practice Under The Saskatchewan Medical Care Insurance Act.

This threat was not made by any lunatic fringe. Nearly every Saskatchewan doctor announced his or her intention to leave the province, or at minimum to withhold services. And they made sure their patients knew of their intentions.

The implication was not lost on their patients. Once public health insurance was enacted, they would no longer receive health care.



A beautiful day for hanging effigies. The signs say "Down With Dictators," "Doctors Are Vital — Is [Premier Woodrow] Lloyd?" and "Weyburn Objects!"

THE insurance industry squashed US health care reform last year **by exploiting the vision of a coldhearted, government-run bureaucracy.** In Saskatchewan, the doctors appealed to a much more basic human instinct: survival.

THE canned letter informed the patient that the doctor's office would be closed until "the government will allow me to treat you, as I have in the past, without political interference or control."

Barootes: "We had public debates on television, we ran a propaganda campaign, and gradually people caught on to this, eh? The citizens formed 'Keep Our Doctors' committees. These sprouted up like mushrooms."

The slogan of these committees was "Political Medicine is Bad Medicine." Keep Our Doctors (KOD) committees focused their wrath on the government and anyone associated with the government's plan. The combination of the doctors' and the KOD committees' campaign raised public emotion to the boiling point.

Operating out of a hotel in Regina, one group had a twenty-four-hour telephone bank calling area citizens. With a recording of a crying baby in the background, a voice on the phone pleaded, "Help me, help me. My baby is dying and there is no doctor to help it." Government officials received threatening phone calls around the clock. The primary medical building in the capital was put up for sale: once health reform was enacted, all the doctors would be gone. The chairman of the government's Medical Care Insurance Commission had his family under twenty-four-hour security. His wife was pregnant but doctors refused to attend to her. The premier's house was painted with graffiti, and a caller threatened to harm his children unless the government changed course. (The premier happened to live half a block from Barootes. The threatening caller was informed "you can find them down the street, playing with the Barootes children!")

What the government called "universal coverage" the doctors called "compulsory state medicine." The doctors in Saskatchewan received publicity kits with the reminder: "The concept of universal medical coverage is not new and the approach by government to seek support is just the same as when first enunciated by Karl Marx in his Communistic Theories..." The kit contained a "personal letter which you may wish to send to your patients." The canned letter informed the patient that the doctor's office would be closed until "the government will allow me to treat you, as I have in the past, without political interference or control."

"We used threats and so on, which incidentally worked very well," Barootes recalls. "The KOD was formed because so many doctors said they would leave. You're a mother with kids or you're pregnant and expecting your doctor to deliver you, and all of a sudden the doctor you've been attending with for years says 'I'm leaving.' . . . Another fear tactic we used, and I may have been part and parcel of it, was directed at the Roman Catholics and the Evangelicals. We said 'The way this act is structured, the government could order us to do sterilizations and abortions.' We made a political cartoon about it."

JULY 1 came and, except for a few emergency centers, doctors withdrew their services.

Allan Blakeney, later to become the premier of Saskatchewan, was a minister in the cabinet at the time: "I have never seen anything approaching this level of public hysteria about an issue," he remembers. "It lasted from late June to mid-July. People were enormously upset. The hysteria was further whipped up by our newspapers. At that moment in time I would guess that 75 percent of the people would have wanted us to suspend the Medical Care Act. We felt we had a mandate to let the people look at it in operation, so we went forward."

Going forward was certainly an act of courage. Six days after the strike began, the Keep Our Doctors committees held a rally. Father Murray, a seventy-year-old priest, gave the most sensational of the speeches. "There has been death, there will be violence, and there could be bloodshed," he cried. Tearing off his coat and clerical collar, Father Murray shouted, "You Communists may think we're naive and hollow-chested, but we gave a hundred thousand boys fighting for the freedom you're fighting against." Now in full stride, he stormed, "Tell those bloody Commies to go to hell when it comes to Canada. I loathe the welfare state

and I love the free-swinging freedom." The priest warned: "I wouldn't be surprised if someone put a bullet in me — I am as likely to get it as Woodrow Lloyd." (Lloyd was the new premier. Tommy Douglas had left Saskatchewan to join the party in Ottawa.)

On July 11, thousands of demonstrators marched on the legislature, carrying effigies of Premier Lloyd and Tommy Douglas, with the caption "Down With Dictators."

Meanwhile the government had initiated an emergency airlift of doctors from England to mitigate the crisis. In response, the acting chairman of the KOD wrote to Premier Lloyd "... We do not want doctors you and your commission can find in distant lands. We do not want card-carrying Communist doctors. ..." One KOD committee sent a telegram to the United Nations, concluding: "Our freedom is at stake. Urgent."

The strong emotions ran both ways. Barootes and his fellow doctors incurred the wrath of the government sympathizers. "We had eggs thrown at our windows, our windows smashed, car tires slashed," Barootes remembers. "I sent my wife and kids about sixty miles away to some friends and they stayed there during that period. Doctors had distinctive licenses: you could recognize their cars. Many of our wives were run off the road. It was frightful.

"Premier Lloyd was threatened, his family was threatened, we were threatened ... those were touchy times."

By the third week of the strike, the tide was shifting. The public began to resent the doctors as well as the government. The doctors remaining in Saskatchewan saw outside doctors taking their place and threatening their livelihood. Both sides were wearying. The government agreed to delete some of the more offensive language from the Insurance Act. The doctors relaxed their demands on the government. Instead of completely abolishing the health insurance act, now they were calling for the right to work outside the act and the right for patients to receive payments from health insurance agencies (which were sponsored by doctors). These agencies would then bill the government. The government agreed. By July 23 the strike was officially declared over.

The scars left by the health reform struggle cost the party in power the 1964 election. The Co-operative Commonwealth Party did not regain power until 1971.

Now the dust has settled. Despite the grueling battle led by Dr. Barootes, he has had to live with and practice under the Medical Care Insurance Act for thirty-three years. Did the nightmare predicted by Dr. Barootes, his fellow physicians, and the Keep Our Doctors committees ever materialize?

"Most of the things that we threatened would happen have not happened," admits Barootes. "They have never interfered with the College of Physicians and Surgeons. Free choice of doctors remains. Do patients still have a concern about their doctor, do they still have respect for their doctors? Yes. ... One of the concerns we had was that people's loyalty would transfer from the physician, who is providing care, to the government, which is paying for it. That has not happened," the champion of the opposition observes.



Dr. Staff Barootes (left) and Premier Tommy Douglas (right) argue the issue of a Saskatchewan Medical Care Insurance Act in a 1960 televised debate.

TEARING off his coat and clerical collar, Father Murray stormed, "Tell those bloody Commies to go to hell when it comes to Canada. I loathe the welfare state and I love the free-swinging freedom."

TODAY I support the universal health care program we have here. **Our people are satisfied with it.** Nobody that I know would be able to change it without a cataclysmic debate."



Dr. Efstathios Barootes in 1970.

"Between us hotheads who sat on the Medical Information Office committee (the doctors' propaganda arm) and the public relations people we had, we would dream up the most god-awful things to say. The cartoons and things we put out were, well, immoderate. Statements from the other side were irrational as well.

"With all its warts and all its problems (and there are plenty of problems), universality, comprehensive benefits, accessibility, public administration, and portability remain the principals of the Canada Health Act, by which the provinces can receive money. I'm a little prejudiced, you know. I will tell you that today I support the universal health care program we have here. Our people are satisfied with it. Nobody that I know would be able to change it without a cataclysmic debate."

Should a similar system be implemented in the US, a waitress would have the same health insurance as a governor. Conversely, the governor would have the same insurance as the waitress. We would all be in it together. As premier of Saskatchewan from 1971 to 1982, Allan Blakeney was Saskatchewan's equivalent of our governor. Was he satisfied receiving the same quality of care as a car mechanic?

"Yes," Blakeney readily states. "I was quite happy with the level of medical care I received and I'm sure the mechanic got the same level of care. I never felt the need for additional medical insurance for my family or me."

Does the Canadian government insurance commission micro-manage the doctors' decisions? "No," says Dr. Barootes plainly. "There has been no interference in the decisionmaking that goes on in a medical office or hospital between a doctor and his patient. We said there would be. Of course we threatened that. That was our big fear, that they would be telling us what to do. There is no intervention between an individual doctor with his individual patient, determining between them what they wish to have done. So we were wrong on that and I admit that.

"While the government does not interfere with my judgment per se, there is intervention in another way," Barootes continues, "and that is in the rationing of health services. As costs mount, the public purse can't support all of the services that are demanded or required or wanted."

Ah, the tender underbelly begins to be exposed. Dr. Barootes readily points to the source of Canada's financial problem. "There may be an element of overservicing by doctors, there may be an element of overutilization by patients."

With I-told-you-so glee, Dr. Barootes says, "We wanted co-payments. They did not implement that, and that was the one prediction of ours that came true, that costs would rise astronomically and that the government would cut back or ration services. We said that costs would rise unless there were brakes put on it, such as deterrent fees."

But while Barootes describes Canada's health care costs as rising "astronomically," Canada spends only two dollars per person for every three dollars per person that we spend on health care. Yet their life expectancy exceeds ours and their infant mortality rate is below ours.

So now, with over thirty years of experience with the Canadian health care system, I try to coax the doctor-turned-senator to offer words of wisdom to us Americans as we continue to struggle with our health care system. He'll have none of it.

"Senator Metzenbaum came up here and so did young Kennedy, I forget his name..." "Joe?" I offer. "No, no, the young one," he exclaims, frustrated. Of course "Joe Kennedy" to him is JFK's father. Poking around the family tree, I hazard, "Ted?" "Ted, that's it," he says, relieved. "They came up here and wanted me to



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go see your new lady president and talk to her about health care. I have not gone down, although invited. I think it's presumptuous of me to say to Americans, please do this or please do that, it works well."

Still trying to appeal to the elder statesman in him, I try a different approach. "Speaking philosophically, as a former senator in the conservative party, what is the conservative perspective on government-sponsored health care?" This gets the desired response.

"What kind of coverage do I, as a conservative, fear? I fear coverage that pays from the first dollar on. That will ultimately mean that brakes must be put on the services. You need co-payments.

"Secondly, be certain that you have at least catastrophic coverage, so when a breadwinner or homemaker has to go into the hospital, with a protracted serious illness like cancer, some kind of catastrophic coverage is available to enable that family to survive that tragedy. We don't have that now. Let's say the husband and wife are both injured in a car accident and are in the hospital for maybe three months. What are you going to do about that household? They've lost their salary. They have payments to make, they have kids to feed. Some kind of catastrophic coverage is needed.

"Ever read Barry Goldwater's book, *The Conscience of a Conservative*? Conservatives with a conscience want catastrophic coverage for families, they want health insurance for all, make sure everybody has it, that there are no cracks in the floor that people fall through. And make sure it can't be cheated on. Not some unemployment insurance type of thing.

"And finally, if you do introduce, say, chiropractic and drugs and so on, for God's sake keep the funds separate from your basic services such as hospital, lab, x-ray, and doctor services. Compartmentalize that. Those dollars should be squirreled away from these other programs that are added and deleted at the whim of some politician. Don't let these programs that come and go encroach on the core services. The dollars that you collect through premiums and however else you do it, earmark them for basic services and make them sacrosanct so nobody can poach on it."

So, if we were to adopt a similar health care system here, what might Bob Dole and other vocal opponents to comprehensive health care reform be saying in the year 2025, thirty years after implementation of the plan?

Dr. Barootes observes, "Today a politician in Saskatchewan or in Canada is more likely to get away with canceling Christmas than he is with canceling Canada's health insurance program."

"Thirty years ago, when you were describing the Saskatchewan Medical Insurance Act as 'legislation reversing the civil rights and liberties of citizens,' did you ever think you would hear yourself saying that?"

"At that time I'd rather have cut my arm off." 🐼

The author wishes to thank Allan Blakeney, Dr. Staff Barootes, Dr. Graham Clarkson, Cheryl Hodge, Donald Tansley, and Ed and Pemrose Whelan for their invaluable assistance with this article. Much of the historical information is taken from two books: *The First Decade* by MacTaggart (1973, The Canadian Medical Association) and *Doctors' Strike* by Badgley & Wolfe (1967, Macmillan of Canada).

CONSERVATIVES with a conscience want catastrophic coverage for families, they want health insurance for all, **make sure everybody has it, that there are no cracks in the floor that people fall through.**

Steve Lyons recently published a book and Windows software combination on homebuying. Homebuyer is available in bookstores nationwide (from Stratosphere Publishing). He holds a degree in electrical engineering from UC Berkeley.

Healing Words

We only need look at our own intimate relationships to recognize the power of words to wound or heal. Dr. Larry Dossey lends scientific and anecdotal credibility to the argument that the power may be much greater than we may have suspected or imagined. And that it is a power well worth examining as a daily practice. —Mark Brady

Countless numbers of people who pray for diseases to go away would be utterly baffled and stunned should this actually happen. As Susan Ertz put it, "Millions long for immortality who do not know what to do with themselves on a rainy Sunday afternoon." What on earth happened? Where did the cure come from? Why did it occur? What is the purpose of my healing? What am I to do with my life now that the disease is gone?

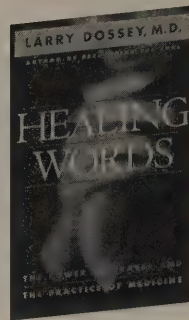
On becoming ill many people adopt a spiritual way of being with a hidden agenda: to rid themselves of disease. The Japanese cases show that spirituality is not a commodity to be used during illness, like a drug. To use spirituality for a specific purpose would be a contradiction in terms, an exercise in hypocrisy. Get-well formulas that advocate spiritual practices are by definition inauthentic because they require that one take on spirituality from the outside, instead of allowing it to emerge from the center of one's being.

The Japanese cases suggest therefore that the key to regression may lie in simply being true to oneself. In order to do this genuinely, one must go beyond all formulas, all paths, all programs, and give up all ulterior wishes — including, perhaps, the hope that the cancer disappears.

This is admittedly a very difficult and unpopular task. People who are ill don't want to hear advice of this sort. They want specific, no-nonsense steps to take — the formula — that will banish the disease. Perhaps the difficulty and unpopularity of these measures is a reason why spontaneous regression of cancer is not more common.

The Persian view of the mind-body relationship was nonlocal: my mind is not localized or confined to my body, but extends outside it. This suggests that it is capable of affecting not only my own body, but other bodies that may be very far away. The Persians were referring to a mind that is nonlocal in space. But minds may be nonlocal in time as well as space, as we will see.

Modern medicine has made it quite unfashionable to think about ideas like these. The possibility that a mind could be nonlocal, that it might extend beyond an individual body, is now considered outrageous, although in times past this was considered an appropriate concern for physicians. We need to lift this embargo.



Healing Words

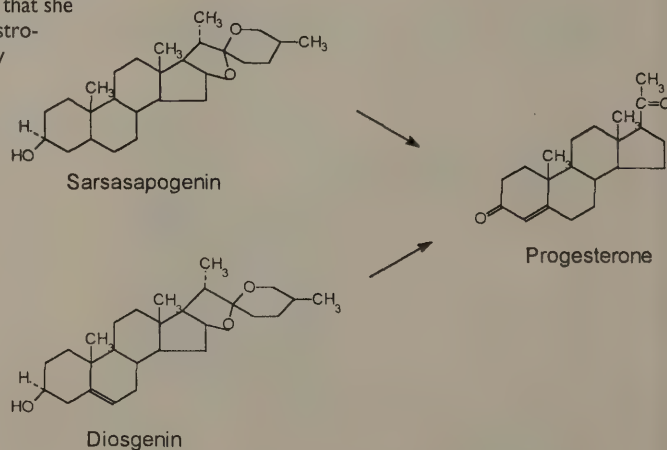
(The Power of Prayer and the Practice of Medicine)
Larry Dossey.
HarperSanFrancisco, 1993;
291 pp. ISBN 0-06-250252-2
\$12 (\$15 postpaid).
HarperCollins Publishers, Direct
Mail, PO Box 588, Scranton, PA
18512; 800/331-3761,
fax 800/822-4090

Natural Progesterone

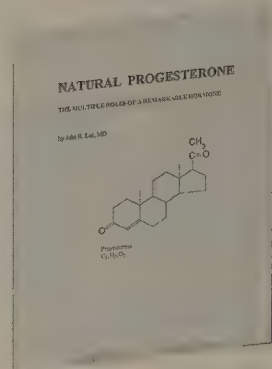
A fascinating book for any woman, describing an alternative to pharmaceutically based Hormone Replacement Therapy. Clearly written with ample data and sources, John Lee provides a convincing argument against HRT with its attendant contraindications and side effects. He discusses the effects estrogen, progestins, and progesterone have on PMS, fibroids, fibrocystic breasts, menopause, osteoporosis, and other conditions. *Natural Progesterone* satisfies on many levels, offering clear explanations of female physiology and the specific role hormones play, and insight into the role of the pharmaceutical industry in promoting hormone therapy.

—Sharon Hennessy

There is a common misconception that menopause, the cessation of menses, means that a woman no longer makes female hormones, that she needs estrogen replacement and the continual care of a doctor; that she has a deficiency disease. The truth is that she merely makes less estrogen than is necessary for the monthly preparation of her endometrium for pregnancy. Estrogen does not fall to zero; her body still makes estrogen from androstenedione in her fat cells.



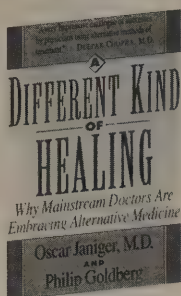
Derivation of progesterone from sarsasapogenin or diosgenin



Natural Progesterone

(The Multiple Roles of a Remarkable Hormone)
John R. Lee. 1993; 99 pp.
\$9.95 (\$11.95 postpaid). BLL Publishing,
PO Box 2068, Sebastopol, CA 95473

A Different Kind of Healing



A Different Kind of Healing

(Why Mainstream Doctors Are Embracing Alternative Medicine)
Oscar Janiger & Philip Goldberg.
Jeremy P. Tarcher, Inc., 1993.
224 pp. ISBN 0-87477-787-9
\$12.95 (\$15.45 postpaid).
Putnam Publishing Group,
Consumer Sales Dept., PO
Box 12289, Newark, NJ
07101; 800/631-8571

Americans may not realize that their insurance premiums do not cover the cost of medical care, but rather place profits in the pockets of shareholders. In *A Different Kind of Healing*, many physicians tell stories about how America's massive insurance bureaucracy sometimes dictates medical practice — even what medicines to use in which patient. This book outlines why doctors have begun to look for an alternative to the poison/slash/burn/cut-it-out practices common to Western medicine.

A Different Kind of Healing comprises anecdotes of doctors and patients healing themselves and each other, without (or despite) current accepted medical practice. The authors present proven herbal remedies and other alternatives to the pill/shot/surgery. The epilogue provides a "how to" checklist for anyone seeking an alternative physician/healer who truly honors the Hippocratic oath while caring deeply for the person in their office.
—M.J. Pramik

Estrogen effects

- creates proliferative endometrium
- breast stimulation
- increased body fat
- salt and fluid retention
- depression and headaches
- interferes with thyroid hormone
- increased blood clotting
- decreases libido
- impairs blood sugar control
- loss of zinc and retention of copper
- reduced oxygen levels in all cells
- increased risk of endometrial cancer
- increased risk of breast cancer
- slightly restrains osteoclast function
- reduces vascular tone

Progesterone effects

- maintains secretory endometrium
- protects against breast fibrocysts
- helps use fat for energy
- natural diuretic
- natural anti-depressant
- facilitates thyroid hormone action
- normalizes blood clotting
- restores libido
- normalizes blood sugar levels
- normalizes zinc and copper levels
- restores proper cell oxygen levels.
- prevents endometrial cancer
- helps prevent breast cancer
- stimulates osteoblast bone building necessary for survival of embryo precursor of corticosterone production

Many postmenopausal women do not need estrogen supplements. Not only does a woman's body continue to produce some estrogen but she is ingesting phytoestrogens (estrogenic substances found in plants) and is exposed to xenoestrogens (estrogenic substances of petrochemical origin in the environment). The addition of progesterone enhances the receptors of estrogen and thus her "need" for estrogen may not exist. If neither vaginal dryness nor hot flushes are present after three months of progesterone therapy, it is unlikely that estrogen supplements are needed.

Hot flushes are not a sign of estrogen deficiency, per se, but are due to heightened hypothalamic activity (vasomotor lability) secondary to low levels of estrogen and progesterone which, if raised, would produce a negative feedback effect to the pituitary and hypothalamus. Once progesterone levels are raised, estrogen receptors in these areas become more sensitive, and hot flushes usually subside. The validity of this mechanism can be tested by measuring FSH and LH levels before and after adequate progesterone supplementation.

OTHER GREAT RESOURCES

Alternative Medicine
(The Definitive Guide):1994;
1068 pp. ISBN 0-9636334-3-0

Alternative Medicine
Yellow Pages: 1994;
225 pp. ISBN 0-9636334-2-2
Both by Burton Goldberg Group.

Updating our access from **MWEC**, p. 190: **The Guide** and **Yellow Pages**, along with an audiotope and one issue of **Alternative Medicine Digest** are available for \$59.95 (\$69.90 postpaid) from Future Medicine Publishing, 5009 Pacific Highway E., Suite 6, Tacoma, WA 98424; 800/435-1221

up; it didn't come with my original education. My psychiatric training was psychoanalytic, but I saw that as pretty limited. It's probably useful as a model of how the unconscious might work, but it didn't give me the tools to heal people."

A G.P. [general practitioner] in Los Angeles: "Medicine in the twenty-first century will surpass our wildest futuristic visions, but it will also be very old-fashioned. Two people talking about this subject in the year 2040 will say we were totally primitive in treating cancer by hacking pieces out of people. They'll be using natural substances to mobilize the body's own forces to destroy aberrant cells."

Chinese Herb Medicine and Therapy

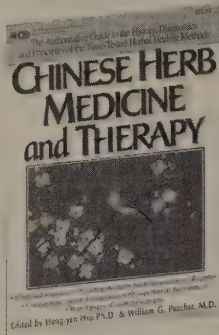
This book is an indispensable guide to the nearly 5,000-year-old Chinese medical system that has begun to attract Western-trained doctors and patients alike. Hong-yen Hsu and William Peacher summarize the history, basic principles, and most common remedies — details of the nature and use of sixty-eight popular herbal formulas and some 200 medicinal plants clearly outline Chinese herb medicine. For biology and language buffs, both the Chinese and botanical names of the plant are given and cross-linked. Western medicine continues to validate the actions of these long-used herbs and this book remains a standard volume for anyone's alternative therapy library. —M.J. Pramik

The original *Nei ching* [The Yellow Emperor's Classic of Internal Medicine, estimated to date from around 2674 B.C.] consists of many parts of which the most important are the "Su Wen" and "Ling Shu." The former deals with physiology, pathology, etiology, and health maintenance; the latter, with anatomy, treatment, and the nervous system.

The Chinese doctor pays particular attention to the patient's voiced complaints in his examination. To elicit these symptoms, he questions the patient extensively.

1. Chills and a somatic cold feeling, both outside symptoms, are divided into yin and yang. A yang patient has an accompanying high pulse and fever. A yin patient has a low pulse, no fever, and fatigue. A feeling of being cold is considered less serious than chills.

2. The presence of fever in Chinese medicine is determined subjectively; it is not the objective rise in body temperature of Western medicine. People with a yang conformation always feel feverish while those of yin conformation rarely do. Cinnamon Combination is recommended for outside fever; Major Rhubarb Combination, for inside fever: the site of disease is internal and severe.



Chinese Herb Medicine & Therapy

Hong-Yen Hsu & William Peacher, Eds.
1993; 310 pp. ISBN 0-87983-653-9
\$22.95 (\$26.45 postpaid). Keats Publishing,
PO Box 876, 27 Pine Street, New Canaan,
CT 06840; 800/858-7014

Acupuncture

This is a perfect text for the absolute beginner who wants an easy, readable account of the subject along with many color photos illustrating needle insertion, moxibustion, and other aspects of Chinese culture. Every question the novice has ever asked is probably answered in this book. —Sharon Hennessey

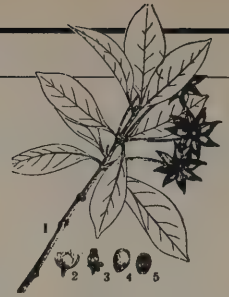
The Oxford Research Project

The project was to study the effects of acupuncture on patients suffering from chronic breathlessness. It was a breakthrough for research in Britain in that it was conducted by a Chinese doctor, using traditional methods of diagnosis and treatment with traditional acupuncture techniques.

Dr Chen, from the Friendship Hospital in Beijing, treated 24 patients with chronic obstructive pulmonary disease. This particular disease was chosen by the Western doctors monitoring the project because it is fairly straightforward to measure results.

Dr Chen treated each patient individually, according to their particular presenting patterns of disease. Twelve patients received 'real' treatment, while twelve received ineffective treatment (although only two out of the twelve guessed that their treatment was any different).

The results were remarkable. Virtually all the



Illicium verum

Anise (Star Anise) (Chinese Anise)

Botanical name: *Illicium verum* (Magnoliaceae)

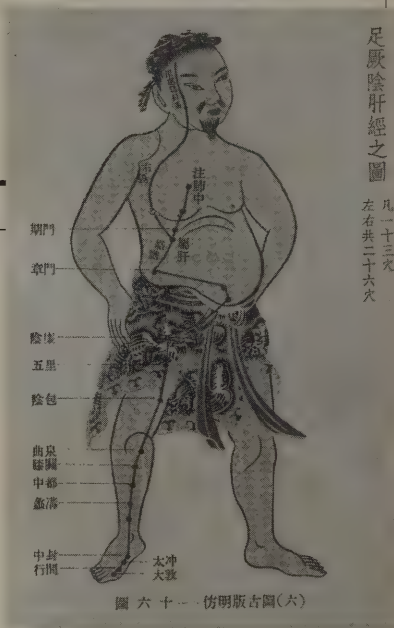
Pharmaceutical name: Fructus Anisi Stellati

Chinese name: pa-chiao-hui-hsiang 八角茴香

Constituents: essential oil, anethol, caren, methylchavicol, *d*-pinene, cymol, *l*-phellandrene, limonenes, hydroquinone, cineol, furfurool, safrol, farnesol, terpineol, dioxybenzoic acid, anisaldehyde, anisketone

Properties and actions: warm; pungent and sweet

Indications: hernia, chilling pain in the chest, abdominal pain, vomiting, anorexia, cholera, beriberi, constipation, lower back pain, atrophy of the bladder



圖六十一 仿明版古圖(六)



Penis et Testis Cervi displayed at a Chinese drug store.

patients receiving the 'real' treatment showed improvement, particularly in their ability to perform physical tasks without becoming breathless. These were all patients to whom the medical profession could offer no further help. Two of the control group also showed slight improvement, which was attributed by the team to Dr Chen's infectious happy disposition!

The project received serious attention by the medical profession and was reported in *The Lancet* as well as in many of the national newspapers.

The Complete Book of Chinese Health and Healing

Daniel Reid has knit together an interesting book emphasizing aspects of Chinese and Western health practices. Yin-yang theory and chee-gung practice are mixed with New Age dietary information, advocating colonic irrigation, fasting, and food enzymes. Though the title does not reveal the dual nature of the approach described within its pages, **The Complete Book of Chinese Health and Healing** is a confluence of advice gleaned from Western and Chinese sources. —Sharon Hennessey



The Complete Book of Chinese Health and Healing

(Guarding the Three Treasures)
Daniel Reid. 1994; 484 pp.
ISBN 1-57062-071-7
\$17 (\$21 postpaid).
Shambhala Publications,
Order Dept., PO Box 308,
Boston, MA 02117-0308;
617/424-0228

fore consenting to teach the Chinese anything, he first insisted on practising nine years of solitary meditation facing a stone wall in a monastery, 'listening to the ants scream'. Among the many lessons which Bodidharma subsequently taught the Chinese was *pranayama*, the science of breathing practised by Indian yogis. This he blended with indigenous forms of Chinese calisthenics, thereby giving birth to *chee-gung* exercise and Chinese martial arts as we know them today.

There are dozens of different diets being touted in health circles today — some of

of *Acupuncture*. He contributed greatly to the recognition of acupuncture in France as an important part of the art and science of medicine.

In Britain serious study of traditional acupuncture did not develop until the 1950s and early 1960s. The links were either through France or from direct contact with teachers and schools in Taiwan, Korea or elsewhere in the Far East. Translations from the Chinese medical classics also became more easily available. Although a Medical Acupuncture Society was set up, its members generally ignored traditional theory as being outdated and incomprehensible.

Acupuncture

(How It Works, How It Cures)
Peter Firebrace & Sandra Hill.
1994; ISBN 0-87983-639-3
\$19.95 (\$22.95 postpaid). Keats Publishing, PO Box 876, 27 Pine Street, New Canaan, CT 06840; 800/858-7014

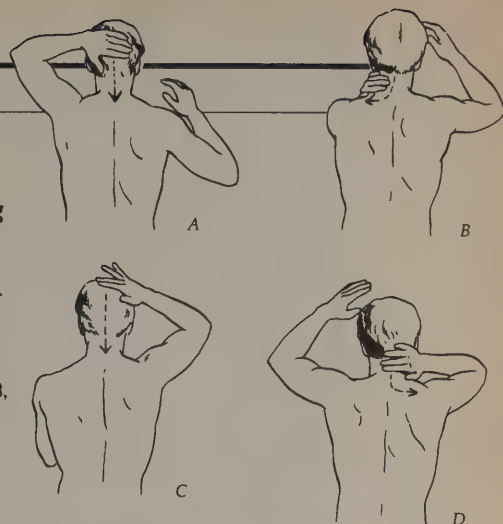
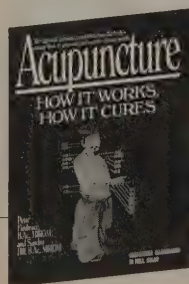


Fig. 32 Back of head and neck rubdown
A. Rub down from crown to back of neck.
B. Continue rubbing down side of neck and place other hand on crown.
C. Rub down head and neck with other hand.
D. Continue rubbing down side of neck.

them useful, others downright dangerous — but the best guidelines of all are always your own knowledge and experience, based on study and personal practice. In formulating their personal diets, Taoists follow the principle of being firm in their goals (health and longevity) but flexible in their methods (diet and nutrition), frequently adjusting dietary and nutritional balance according to fluctuations in health, lifestyle, environmental conditions, seasonal cycles, residential locations, and so forth. Rather than trying strictly to follow arbitrary rules that stipulate which foods may or may not be eaten, as most fad diets require, the Taoist way is to follow firm principles of diet and nutrition and apply them flexibly from day to day, according to the changing circumstances.

Besides robbing us of health and vitality, emotions constitute the greatest obstacle to spiritual cultivation by diverting energy and attention from internal development to external distractions, and by provoking behaviour that contradicts our best intentions. Our emotions constitute our own worst enemies, yet not only does Western medicine overlook the severe pathological consequences of emotional imbalance, Western philosophy romanticizes emotions as heroic impulses to be indulged rather than recognizing them as primitive instincts that must be controlled by the higher sentience of human awareness. Herein lies one of the most fundamental differences between Eastern and Western tradition, for Eastern philosophy clearly identifies emotions as obstacles to spiritual development, pollutants to mental clarity, spoilers of human relations, and enemies of intent and reason.

The whole theory of Chinese medicine, with its emphasis on Qi, evolved out of an era of philosophical speculation and intense consideration of the nature of life. It is no coincidence that great thinkers such as Kong Fu Zi (Confucius), Lao Zi, Meng Zi, and Zhuang Zi preceded the great classic of Chinese medicine, the *Huang Di Nei Jing* — 'The Yellow Emperor's Classic of Internal Medicine' — which was compiled between 300 and 100 BC. While neither a Daoist nor a Confucian text, it draws on both their traditions and perspectives. The Daoist philosophers in particular, who were masters of the simple and essential, have always been known for their interest, not only in the nature of reality, but also the maintenance and improvement of vitality through specific exercises and techniques such as medication, breathing, and massage.

The development of acupuncture in Europe this century was given its initial impetus largely by Dr Soulie de Morant's *L'Acupuncture Chinoise*, published in 1929, which he used as a text to teach traditional acupuncture to French medical practitioners. Much of his teaching came directly from the *Zhen Jiu Da Cheng*, the seventeenth-century Chinese *Compendium*

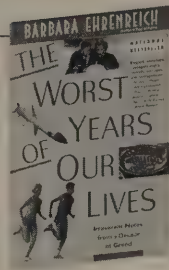
The Worst Years of Our Lives

Just in time for the resurgence of the right as led by Newt, Rush, and friends, Barbara Ehrenreich's 1990 book, *The Worst Years of Our Lives: Irreverent Notes from a Decade of Greed*, has been republished. In fifty short, savage, unerring pieces the goddess of the Swiftian essay skewers television, celebrities, racism, sexism, religion, politicians and politics with a voice of compassion, values, and biting good sense. These essays are every bit as timely as they were five years ago; the players on the right have brought in a new team, but it's still the same old game. —Alana Stewart

■ Sometime in the eighties, Americans had a new set of "traditional values" installed. It was part of what may someday be known as the "Reagan renovation," that finely balanced mix of cosmetic refinement and moral coarseness which brought \$200,000 china to the White House dinner table and mayhem to the beleaguered peasantry of Central America. All of the new traditions had venerable sources. In economics, we borrowed from the Bourbons; in foreign policy, we drew on themes fashioned by the nomad warriors of the Eurasian steppes. In spiritual matters, we emulated the braying intolerance of our archenemies and esteemed customers, the Shi'ite fundamentalists.

■ It would be a sickening irony if all the bright, ambitious young women among us were to be defeated — not by men — but by a shortage of them. And we women would only have ourselves to blame. I mean, we must be suffering from a terminal case of "fear of success" if we're going to let a numerical advantage for our side turn into a reason for a full-scale retreat back to the kitchens and typing pools.

Instead, maybe we ought to be figuring out how to beat them while we still outnumber them. Here's our chance, it seems to me, to mobilize to get pay equity, strict child-support laws, subsidized child care, paid parental leave, and a few other items that have been of only incidental interest to the minority sex. In the end, they'll probably thank us and claim they would have done all that themselves if there'd only been enough of them. And we'll just smile back prettily.



The Worst Years of Our Lives

(Irreverent Notes from a Decade of Greed)
Barbara Ehrenreich.
HarperPerennial, 1981, 1991;
275 pp. ISBN 0-06-097384-6
\$12 (\$14.75 postpaid).
HarperCollins Publishers,
Direct Mail, PO Box 588,
Scranton, PA 18512;
800/331-3761,
fax 800/822-4090

The Snarling Citizen

The only disappointment I had upon reading the republication of Barbara Ehrenreich's *The Worst Years of Our Lives* was that figures of recent notoriety (political and otherwise) had escaped her wicked critique. To my great relief, she savages everything from Arnie, Bobbitt and cloning; to the zeitgeist of the nineties in her latest collection, *The Snarling Citizen*. As I snork and chortle my way through these pages, the world seems, well, not "right again," but at least I know that someone besides myself realizes that.
—Alana Stewart

■ The children want to know what a "cult" is exactly and whether the Girl Scouts qualify. . . .

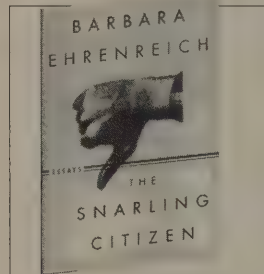
No, I tell them, in addition to the suicide aspect, cults are required to have some religious or quasi-religious dimension as well. The exception would be Scientology, which, as its name implies, is the very opposite of a religion and is, in fact, a system for removing "engrams," or peculiar little blockages, from the minds of celebrities . . . along with money from their bank accounts. When one of these secular-type cults gets large enough, it is known as an "organization." Eventually, when the money-garnering techniques are perfected

From Danger to Dignity

I brought this video into a roomful of noisy friends. By the end of the opening sequence there was silence, punctuated by gasps and outbursts of encouragement, disbelief, and horror. When it ended, a discussion broke out on the political and social implications of legal vs. illegal abortion, then and now.

In *From Danger to Dignity*, women who underwent illegal abortions, or who attempted to abort themselves, tell their stories. Through interviews and archival footage doctors, clergy, legislators, and women of all backgrounds explain their involvement in the movement for safe abortion from 1961 until the 1971 Roe vs. Wade case. Directed by Academy Award nominee Dorothy Fadiman, *From Danger to Dignity* is beautifully documented, moving, thought-provoking, and horrific.
—Liz Curry

and the quasi-religious activities have been narrowed down to "motivational workshops," it may be referred to as a "corporation."



The Snarling Citizen

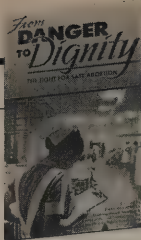
(Essays)
Barbara Ehrenreich.
Farrar, Straus &
Giroux, 1995; 256 pp.
ISBN 0-374-26648-4
\$20 (\$24.25 postpaid).
Putnam Publishing
Group, Order Dept.,
PO Box 506, East
Rutherford, NJ 07073;
800/631-8571

■ In the spirit of a public-health campaign, the American Society for Plastic and Reconstructive Surgery (ASPRS) has launched a PR drive to "tell the other side of the [breast-implant] story."

. . . Small breasts are not just a harmless challenge to the bikini wearer or would-be topless entertainer. They are a disease, a disfiguring illness for which the technical term is *micromastia*. . . .

Once we understand that small breasts are a "disease," it's easier to see why Dow Corning and others rushed so breathlessly to get their implants onto the market. Why diddle around with slow, costly tests while an epidemic is raging out

there? And everyone's life is touched by the tragedy of micromastia because everyone has a friend, sister, co-worker, or wife who falls pitifully short in the mammary department. In the past, small groups of health-conscious males, typically gathered at construction sites, would offer free diagnoses to women passersby.



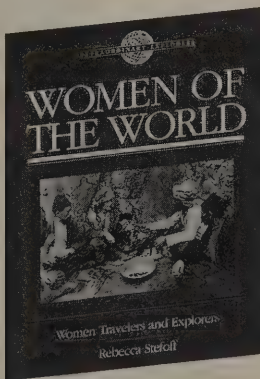
From Danger to Dignity

(The Fight for Safe Abortion)

Dorothy Fadiman, Beth Seltzer, Daniel Meyers, Producers. 57 min. VHS Video \$49.95 (\$54.95 postpaid). Concentric Media, PO Box 1414, Menlo Park, CA 94026

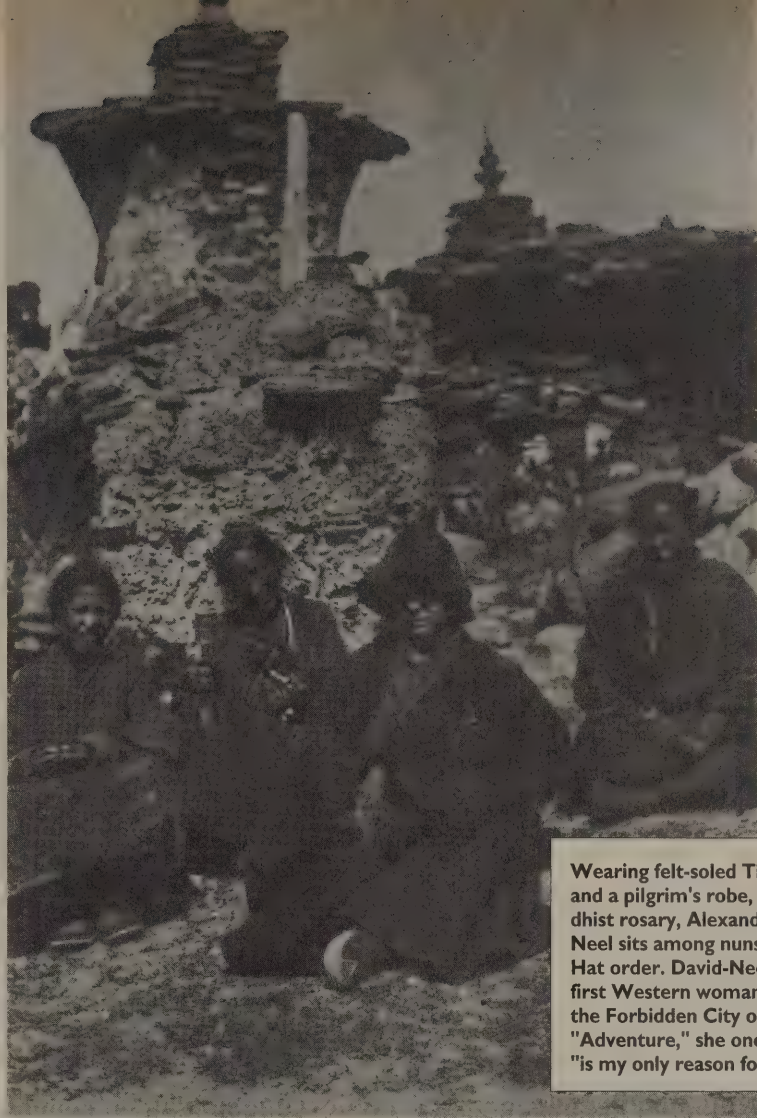
It was 1962; I was 22 years old. I was rushed to the hospital with a fever of 105 and blood poisoning. I had had an illegal abortion. I was blindfolded, without anesthetic. I never saw the face of the abortionist. My doctor, who had refused to provide a legal abortion, would now try to save my life. Because I had good medical care I survived. Many women died.

There are many who say that this bill is abortion on demand. I submit that it is not. I submit that we have abortion on demand in the state of New York right now. Any woman who wants an abortion can get one and the real difference is how much money she has to spend. If she has \$25 she has it done here under the most abominable circumstances. If she has more money she can go abroad but the fact remains that she can get it. We have abortion on demand and if she does not have the \$25, please remember that she can abort herself. And regretfully, regretfully, this happens more than we care to admit.



Women of the World

(Women Travelers and Explorers)
Rebecca Stefoff. 1992; 152 pp.
ISBN 0-19-507688-5 \$13.95 (\$16.95 postpaid). Oxford University Press, Order Dept., 2001 Evans Road, Cary, NC 27513; 800/451-7556



Wearing felt-soled Tibetan boots and a pilgrim's robe, with a Buddhist rosary, Alexandra David-Neel sits among nuns of the Red Hat order. David-Neel was the first Western woman to reach the Forbidden City of Lhasa. "Adventure," she once said, "is my only reason for living."

Women of the World

As my first trip to Tibet was inspired by the intrepid woman explorer, Alexandra David-Neel, I was delighted to learn more about her travels as well as those of eight other women explorers. **Women of the World** gives informative biographical sketches of women travelers from 1842 to 1952, as adventurers, geographers, and escapees from the stifling environment of Victorian England. These accounts will broaden young adults' understanding of the contributions of women explorers, and it will inspire future travelers. —Sarah Shockley

Indeed, much as I have enjoyed life in Africa, I do not think I ever enjoyed it to the full as I did on those nights dropping down the Rembwé. The great, black, winding river with a pathway in its midst of frosted silver where the moonlight struck it; on each side the ink-black mangrove walls and above them the band of star and moon-lit heavens . . . Ah me! Give me a West African river and a canoe for sheer pleasure. —Mary Kingsley, 1862-1900

This is the height of enjoyment in travelling. I have just camped under a *lauhala* tree, with my saddle inverted for a pillow, my horse tied by a long lariat to a guava bush, my gear, saddle-bags, and rations for two days lying about, and my saddle blanket drying in the sun. . . . The novelty is that I am alone, my conveyance my own horse; no luggage to look after, for it is all in my saddle-bags; no guide to bother, hurry, or hinder me. —Isabella Bird Bishop, 1831-1903

This is a great moment, when you see, however distant, the goal of your wandering. . . . It matters not how many ranges, rivers, or parching dusty ways may lie between you: it is yours now forever. —Frey Stark, 1893-1993

Navajo & Tibetan Sacred Wisdom: The Circle of the Spirit

Peter Gold made an exhaustive study of the Tibetan and Navajo communities within the framework of a new discipline called "spiritual anthropology." He discovered many fascinating parallels between two ancient cultures that developed on opposite sides of the planet.

Both are oral cultures; they retain a connection with the natural world and with themselves that industrialized communities have learned to disvalue. Both have been shattered by colonial imperialism, but they have found the grace to insist on retaining their identities and their sacred cosmologies. Valuing balance, they attend to the journey toward that state. Western cultures might want to consider these values as it begins the work of cleaning up after the Industrial Revolution. In this book, you will find poetry, legend, anthropological data, fine illustrations, and clear explanations of esoteric practices. It is a virtuoso exercise in connectivity.

—Carmen Hermosillo

• You need oppositions; you need negative in life's movement; you need the whole force. —Navajo philosopher

• The first three principles of the circle of the spirit attempt to outline what Joseph Campbell so eloquently called "those lessons of the way to human wholeness, which for millenniums have been held the most treasured possessions of man." But there is a fourth movement to the circle's symphony. This fourth principle of becoming holy describes the practical method for personally embodying the first three principles through participating in the rite of transformation.

According to the Navajo and Tibetan paradigms, all beings can attain everlasting life, or buddhahood, through understanding and fully merging with the Beauty, or the Void. But this state can be reached only by means of a well-programmed ritual event, which is the rite of transformation. . . .

Ritual re-creates the pathway along which ancient heroes- and heroines-to-be had taken their spiritual journeys. It is often described in Navajo and Tibetan teachings as a rainbow-lit trail into an ideal reality in which the hero(in)es learned how to generate spiritual beauty within themselves and how to radiate it without.



The Fifth World of the Navajo is a landscape of sacred natural places invested with spiritual power and sentience.



Central Tibet is a vast mosaic of sacred natural features and human-made shrines, monasteries, temples and spiritual sites.

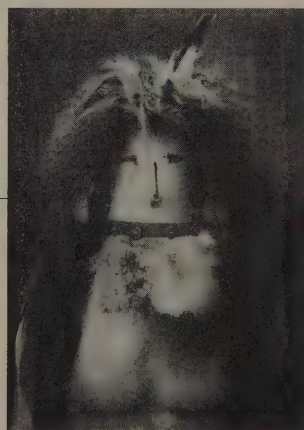
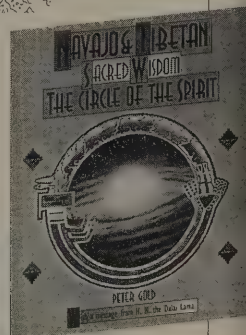
Navajo & Tibetan Sacred Wisdom

(The Circle of the Spirit)

Peter Gold. 1994; 334 pp. ISBN 0-89281-411-X

\$29.95 (\$32.95 postpaid). Inner Traditions International,

1 Park Street, Rochester, VT 05767; 802/767-3174



Left to right: Fringemouth God buckskin mask, Black God mask, Female yei buckskin mask, Talking God buckskin mask.

The Jew in the Lotus

The Dalai Lama met with a group of Jewish leaders in Dharamsala to learn the secrets of Jewish cultural survival through generations of diaspora. Poet Rodger Kamenetz came along to observe the historic moment. *The Jew In The Lotus* is his record of a spiritual journey, with its paradoxes, arguments, humor, and learning. Kabbalah encounters Buddhist tantra, perhaps not for the first time, but never before so accessibly. In the struggle for spiritual and cultural survival in the modern world, the participants engage in true dialogue — the kind that “changes the speakers from you and me to we and us all.”

—Rachel Silber

Obviously, the Dalai Lama's efforts at both preservation and adaptation are very important. But in Jewish life, much of the day-to-day task of preservation has fallen on women. The active site has not been the temple, but the home. It was Blu Greenberg's turn to speak. She is not

only a Jewish mother and grandmother but also the author of *How to Run a Traditional Jewish Household*, an excellent guide to the subject.

Blu began by praising all the efforts and achievements of the Tibetans over the last thirty years, “the planning ahead and looking forward,” but added in a homely way that brought the discussion down to earth, “nevertheless, exile is exile.” She wanted to talk about what she feels has been the most significant institution for helping the Jews through a very long exile, the family. And she wanted “to know from Your Holiness what role you see the Tibetan Buddhist family playing in the years ahead.”

Now the Dalai Lama offered the Jews advice. Open the doors and open them wide. In learning about Jewish mystical teachings, he confessed that he had “developed more respect toward Judaism because I found much sophistication there.” He thought that what he had learned about the four levels of interpretation and Jewish meditation is very important and should be made



The Jew in the Lotus

(A Poet's Rediscovery of Jewish Identity in Buddhist India)
Rodger Kamenetz. HarperSanFrancisco, 1994; 304 pp. ISBN 0-06-064574-1 \$12 (\$14.75 postpaid). HarperCollins Publishers, Direct Mail, PO Box 588, Scranton, PA 18512; 800/331-3761, fax 800/822-4090

available for everyone, especially to the sharp-minded. He gave a parallel from Buddhist history. Like kabbalah, traditionally Buddhist tantra as taught in India had been very secretive, very confidential, and given only very selectively to very few students. “Public teaching never happened.” But if there is too much secrecy, sometimes there is a danger that the tradition will discontinue and that many qualified persons will miss the teaching and the practice.

Pure Heart, Enlightened Mind

Maura O'Halloran was an exceptional young woman: a spiritual seeker brimming with good Irish gusto. In *Pure Heart, Enlightened Mind* we read over her shoulder as she enters in her journal the experiences of life in a Tokyo zendo and a rural mountain monastery. Never before has the printed word allowed me to feel as intimate to a seeker's heart or mind. She's so likable and bright that I was soon cheering her on through koan challenges, and sympathetically shivering as she meditated through the cold evening hours. She's so honest that I shared her self-doubt and moments of frustration. Maura scrubbed the windows of perception with uncommon discipline and verve, and through these journals she shares with us the sweat and the view. —Winslow Colwell



February 25
I began. Each noise, sight, movement was me. I was tremendously excited, quivering,

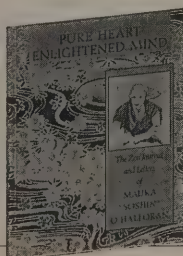
smiling. As if there was a statue, my physical body, with a cloth draped over it, hanging close around my body; it was what I defined as self. Now a tack through the head and cloth, someone is raising it and stretching it; it's still attached to my body but covers more and more, and that is me. How can I die or cease to be? I am eternal, I am process and thing. I am my mother. I am Roshi.

December 27

Christmas Eve I was a little lonely at the edges, so I packed myself off to do soji. It worked. Then I lopped off the top of a pine tree during the blizzard and covered it with colored ribbon, then deep-fried overiced “things.” The electric power failed. Dinner was by candlelight — gruel and cabbage. Watching the snow fall, so soft and firm like a mother patting her baby to sleep, by the gentle glow of a single candle, I felt quite still and at one, in peace with the world. No Christmas Eve celebrations, and it didn't matter. The lights were out, so I settled down to meditate by the wood stove. Tachibana Sensei burst in like Santa, bearing a bag of goodies. Behind him, his boys tumbled in like elves. He brought a naggin of whiskey and the best fruit cake I've ever had, made right in dear dirty Dublin and enjoyed in Japan. Looking out the window, the candle seemed to glow inside me, but the wood fire seemed to crackle from the inside, too. Felt so happy, so simple.

Pure Heart, Enlightened Mind

(The Zen Journal and Letters of Maura “Soshin” O'Halloran)
Maura O'Halloran. Riverhead Books, 1994; 192 pp. ISBN 1-57322-503-7 \$13 (\$17 postpaid). Putnam Publishing Group, Consumer Sales Dept., PO Box 506, East Rutherford, NJ 07073; 800/631-8571



What to Tell the Children

BY NANCY PIETRAFESA

I GOT THE WORD ON SEX somewhere in 1957. The Dark Ages. Before the full-body shots of Elvis on the Ed Sullivan Show with the infamous pelvis blacked out. We've come a long way since then. Haven't we?

The first time I heard about it — that people *did it* — I was standing in Cindy Talbot's driveway with a hula hoop in my hand. Riveting news. I went into an intense research mode. Weeks after a fervid polling project of peers within biking or phone range, I had a broad outline of *it*: vaginas went around penises, penises were guided into vaginas. Actual private body parts were coupled in pursuit of babies. Wow. This gave new meaning to large gatherings of people with children. All of these people had *done it!*

Around the same time my mother was occasionally reading to me from a pale pink book entitled *Listen, Daughter*. It was a cozy tome, filled with references to "the marital embrace" and a "thin veil of maidenly hair." I suppose the fuzzy terms were intended to encourage comfort with my developing body and its future in marriage. They didn't. And I didn't connect doing it and my growing wealth of street info with what my mother was talking about in our "woman-to-woman" chats either. Not until I borrowed an honest-to-goodness, fact-filled book on sex (which I suspected was published by Protestants or Communists) did "the facts," and a modicum of self-assurance, fall into place. And even then I couldn't have guessed that what I read was linked in any way to the pleasure I had found in my own body and the love I hoped might be in my future.

I give a good sex talk as a result of this history. My children are all boys, and I'll be damned if they're going to view females with the wacked-out sexual mystique that hovered around every fifth-grade girl on her way to the menstruation film in the American fifties. What happens to girls? Where are they going and what are they talking about? They were going to the gym to see a filmstrip produced by Walt Disney (hey, he's always been a part of our fantasy lives) entitled "Growing Up and Liking It." Ordinarily, we wouldn't have liked it, but Walt managed to depict the uterus, fallopian tubes, and ovaries as reassuring — they resembled a set of



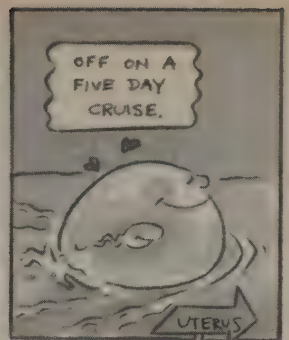
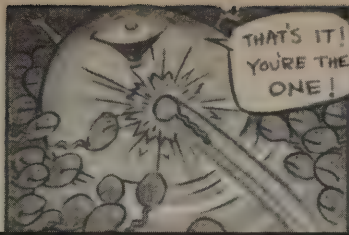
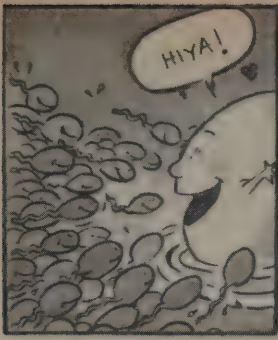
handlebars on a two-wheeler. I think I got it at the time, but my sister reports that for a year she expected tissue (the Kleenex variety) to come out of her vagina.

I've tried to be cool and offhand. (Deep breathing helps until you get into the groove.) My twelve-year-old comes home from camp and asks if a mosquito bite on his scrotum is dangerous. His father is in the same room, but neither of them consider this a guy subject, *per se*. (Answer: No, but make sure it's on your scrotum, the bag part of your penis, not on one of your testicles, or balls. Try to be aware of your testicles, and feel them regularly to make sure they're the same walnut shape and size. We need to see a doctor if there is a lump or swelling on your testicles.) See? Once I got the hang of it (oops), I wasn't bad. And the part I like is that my male children don't think it's weird that their mom knows about male bodies. I do my best to be direct, informative, and relaxed.

But giving kids the facts about their bodies and adolescent emotions is not as far away from the fifties as I first thought. The sex talk is Chapter One of the whole book called Sexual Health. Just when I got comfortable with the sex chat, I began to understand the importance of going all the way. Through what I said and did, in the way I offered observations as well as facts, I promoted a sense of comfort and clarity about sex — a sense of our values as a family and our hopes for our children. This takes more than a few moments of personal reflection. And for most of us, it's not entirely easy. But it's been critical to me. Need some convincing? Take a look at how widely sex is accompanied by guilt, fear, inequality, lack of enjoyment and fulfillment, fear of intimacy, and ignorance of Eros. Few of us aim for that, but an awful lot of people end up there.

There are plenty of sound books on the subject of sex, and I strongly suggest that you throw them in with all the other books your kids have. Sexual mysteries should have at least the same status as Nancy Drew mysteries. It may help your kids see that sex isn't compartmentalized in some strange corner of the world, which in turn may lessen the chance of it being compartmentalized in some strange corner of the psyche. Also, it's a good idea to bring up the subject of sex and related issues once in a while. Somewhere (everywhere, it seems) it is written that parents will do best by their

All illustrations from *It's Perfectly Normal*.

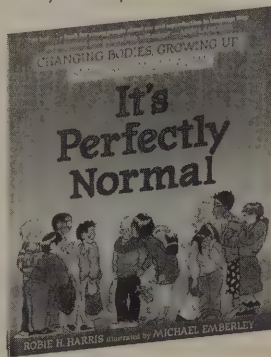


It's Perfectly Normal

We've field tested this one. It is one of the preferred books I find on the floor next to my eleven-year-old's bed. My eight-year-old took it to school with a grin on his face. It was sent home because the teacher feared it would be damaged from overuse. (She has a classroom copy now.) The new household mantra with regard to things sexual is used by even my five-year-old: "It's perfectly normal."

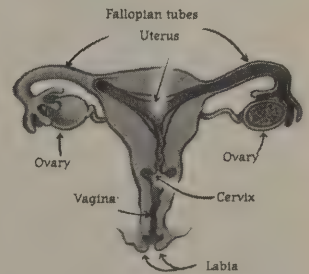
Sexual behavior is normal, but much of what kids read, and how adults behave, sends a different message. This book provides a wealth of information in a lighthearted, unselfconscious, and relaxed manner. The charming, plentiful watercolor and pencil illustrations take the subject out of the clinical mode. It looks like ordinary people have sex. It looks like they enjoy it. There is straightforward information about the usual and then some — sexual jokes, alternative families, desire and maturity, geriatric sex, etc. A clever running joke between a bird and a bee carries the strong subtextual theme: sex can be a little embarrassing, but it sure is fascinating, and, well, perfectly normal.

—Nancy Pietrefesa



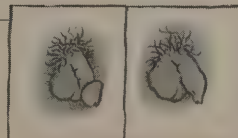
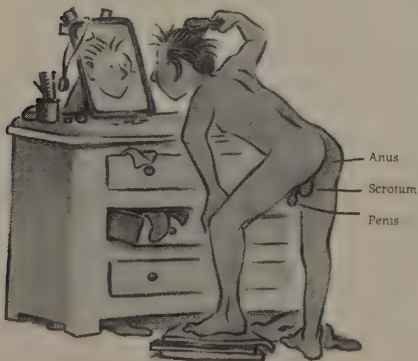
It's Perfectly Normal

(Changing Bodies, Growing up, Sex, and Sexual Health)
 Robie H. Harris. Candlewick Press, 1994; 89 pp. ISBN 1-56402-199-8 \$19.95 (\$21.95 postpaid).
 Penguin USA, Consumer Sales, 120 Woodbine Street, Bergenfield, NJ 07621; 800/253-6476



children if they answer only the question being asked, when it is asked. There's a danger in that: more often than not, a child may not be asking what a parent thinks he or she is asking. Sex comes up in adult conversation all the time, so why not in family discussions? If a child always has to initiate a sexual inquiry, he is sure to make one of the following conclusions: that the parent cares little for the subject; thinks infrequently, if at all, about it; or probably doesn't know very much about it in the first place. The child is also going to stop initiating as soon as he finds alternative sources of information. You and I did, didn't we?

I call these books the second generation of sex books: they offer kids and parents help in moving toward communication that fosters not only an understanding of the facts, but an appreciation for the importance of sexual health and where it fits into our daily lives. And if you've given it any thought, you know that sexuality is in our daily lives, in our interactions, and in all our valued relationships. None of this is easy, but few of us think lightly of



Circumcised penis Uncircumcised penis

our children's nutritional, educational, or spiritual needs. A secure sexuality enables us to transcend ourselves, to establish enduring, intimate relationships. It's a way of being momentarily beyond the limits of yourself. It is intensely focused on all the physical possibilities of self. People talk about it, they do it, they obsess about it because they hope there is a chance they can hit everything right with another human being in a sexual moment.

I hope this is going to work for me. If I've given my children a solid sense of their sexuality, I feel they are armed against exploitation, confusion, and guilt. I want my kids to have a straight shot at self-confidence and self-acceptance. I want them to have self-respect and seek it in others. Most of all, I want my kids to feel they can come to me for information or help in sorting out their thoughts. I want them to know there is love and concern here, not disapproval, indifference, or censure. So I tell my children the truth: rather than dirty, sex is a way of coming clean. 🍌

Nancy Pietrefesa lives, writes, and has sex in Berkeley, California.

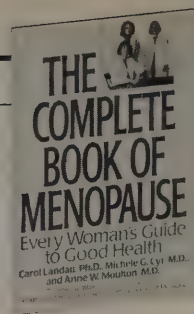
The Complete Book of Menopause

Hot flash! As female baby boomers pass forty, the word menopause is becoming synonymous with the long-dreaded "mid-life crisis," symbolic of all those unpleasant symptoms and lifestyle changes that women have come to associate with aging.

The Complete Book of Menopause, written by three female doctors, offers a framework of specialized and comprehensive knowledge to demonstrate that this ain't necessarily so. Illustrated with case histories drawn from the authors' own extensive practice in women's health, the book emphasizes a biopsychosocial model of menopause: hot flashes, hormone replacement therapy, and the threat of osteoporosis share space with chapters on depression and sexual adjustment.

The guide's detailed directory of resources includes books, magazines, newsletters, and organizations. In addition, the book offers an extremely useful list of the hundred most commonly asked questions about menopause, culled from real practice.

While every woman goes through menopause, each woman experiences it differently. The ease with which she makes this important transition will depend on the extent to which she honors her individuality. As this guide reminds us. —Patrizia DiLucchio



The Complete Book of Menopause

(Every Woman's Guide to Good Health)

Carol Landau, Michele G. Cyr & Anne

W. Moulton. Perigee Books, 1994;

367 pp. ISBN 0-399-51906-8

\$15 (\$18.50 postpaid). Berkley Publishing Group, Consumer Sales Dept., PO Box 506, East Rutherford, NJ 07073; 800/788-6262

Menopause

For women to whom real stories are more compelling than facts and figures on a two-dimensional page, Moondancer Productions offers a decidedly New Age look at menopause. Interviews with women who have been through menopause as well as with physicians and healers — for example, the medical director of the Malibu Health Center — offer the viewer something she can relate to that emphasizes the hopeful possibilities and opportunities for growth inherent in this transition. Small quibbles: the soundtrack seems to have been borrowed from a spaghetti Western, and I found myself wishing for just one woman named Mary amidst those interminable Thunders and Katramas. Still — if you are the type of person for whom one video is worth ten thousand words, this may be the menopause reference for you. —Patrizia DiLucchio



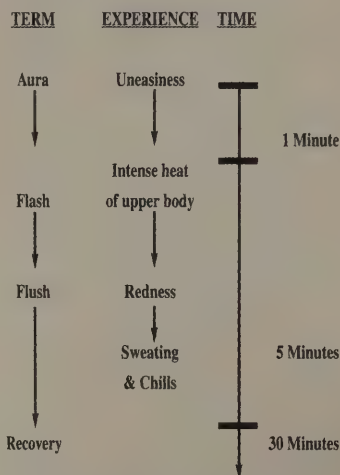
Menopause

(Dispelling the Myths, Telling the Truths, Exploring the Possibilities)

Jill Holden, Producer. 70 min. VHS Video \$39.95 (\$48.85 postpaid). Moondancer Productions, 1767 Goodyear Avenue, Suite 101, Ventura, CA 93003; 805/642-4008, fax 805/642-6350

• Hot flashes can occur any time during the day but seem to be most frequent from six A.M. to eight A.M. and six P.M. to ten P.M. This may be good news for the women who work outside their homes from nine A.M. to five P.M. and fear that hot flashes will interfere with their work. The frequency of hot flashes varies considerably from woman to woman, from day to day, from year to year. It appears that almost half of women in the forty-to sixty-year-age group report hot flashes on a daily basis. Far fewer report multiple hot flashes in a day, or as few as one hot flash per week.

• There is tremendous variation in rates of hysterectomy within our country. Women in the South have more hysterectomies than women in the North. One study revealed that in Maine, 70 percent of women in one city had hysterectomies whereas another city had a figure of 20 percent! In addition, African-American women have hysterectomies more often than white women. Hysterectomy is so common among African-American women in the South that it has been referred to as "a Mississippi appendectomy." Although African-American women tend to have fibroids more often than white women, hysterectomy may not be the most appropriate treatment for fibroids that are not life-threatening. These economic, regional, and racial differences need to be researched further. It is also clear that physicians' and patients' individual beliefs about hysterectomy must be factors.



If you have never had a hot flash, this is what it is like.

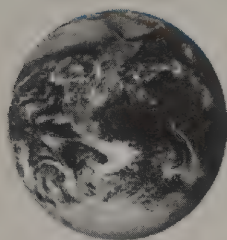
The Pause

Menopause. Ouch! The word sounds so final, somehow: a life sentence without possibility of reprieve; a chronic, unpleasant female condition, carrying with it all the negative cultural connotations of times past when women were chiefly valued for our reproductive capacities.

But menopause is really just another transition in a woman's life, a natural resting point in a process of growth and development that starts long before we are born.

So let's call it something else, suggests Lonnie Barbach. Let's call it *The Pause*. A fermata in the orchestrated movements of female existence. A part of the whole. A piece of what we are.

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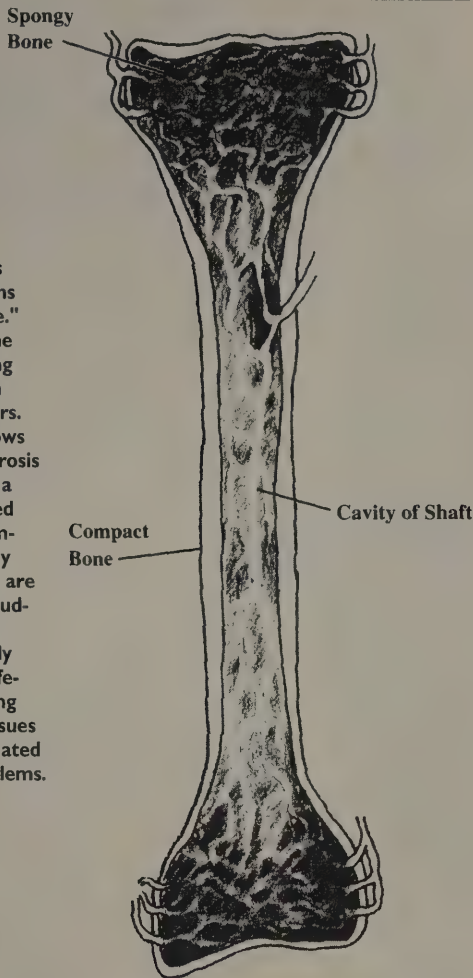
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Bone Structure

Osteoporosis literally means "porous bone." It is one of the most disabling and common bone disorders. Research shows that osteoporosis is not simply a disease caused by calcium imbalance. Many other factors are involved, including: genetics, exercise, body frame, and life-style, including nutritional issues and other related medical problems.

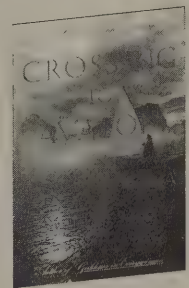
Crossing to Avalon

To those of us swimming in the midlife transition, Jean Bolen offers the simplicity and gentleness of being patient with ourselves — allowing our hearts to open to and embrace the synchronicities that give color and meaning to our lives and light our paths. Creating a rich tapestry devoid of cliché, she weaves myth, metaphor, and personal story, often reminding us that what we may be feeling is the "remembering" of the Goddess as she returns to our consciousness. Many times I was brought to tears as I came across my own feelings and "knowings" within the pages of her story. —Andrea DuFlon

I have often felt myself to be a point of light, connected to everyone I have ever loved or mattered to, each also being a point of light, in turn connected to those they love, so that somehow we are all part of a vast web of twinkling lights. I think that each individual light can grow brighter or dimmer over the course of a lifetime, and that whenever a light goes out on this web, it affects me. It feels as if everyone who acts compassionately, works to raise consciousness, to save the planet, to make a difference in some significant way is linked to everyone else who also does.

Crossing to Avalon

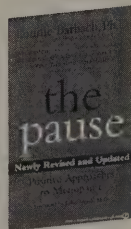
(A Woman's Midlife Pilgrimage)
Jean Shinoda Bolen.
HarperSanFrancisco, 1994;
271 pp. ISBN 0-06-091291-X
\$21 (\$23.75 postpaid).
HarperCollins Publishers,
Direct Mail, PO Box 588,
Scranton, PA 18512;
800/331-3761,
fax 800/822-4090



Barbach's useful guide reminds us that menopause is seldom an abrupt event; the onset of this stage is most often gradual and its earliest symptoms are easily overlooked.

The Pause is packed with valuable information, including a symptom-by-symptom breakdown of the physical changes women experience as we approach menopause, as well as tips on herbs, acupuncture, homeopathic remedies, diet, exercise, and new advances in hormone therapy. What Barbach particularly wants to stress to her readers is that menopause is not a pathological condition to be dreaded, but a natural developmental phase that occasionally requires intervention.

And what that intervention is should be up to you. —Patrizia DiLucchio



The Pause

(A Positive Approach to Menopause)
Lonnie Barbach. Plume Books, 1993,
1995; 302 pp. ISBN 0-452-27505-9
\$11.95 (\$13.95 postpaid). Penguin USA,
Consumer Sales, 120 Woodbine Street,
Bergenfield, NJ 07621; 800/253-6476

Dr. Bruce McEwen and his colleagues from the Laboratory of Neuroendocrinology at Rockefeller University in New York have been studying the effect of estrogen on the brains of female rats. "Estrogen definitely

affects the number of synapses in the hippocampus in rats," Dr. McEwen told me. "This is a part of the brain that is involved in learning and memory. Lowered estrogen levels mean fewer synapses. While human female brains are quite different from rats', there are some similarities. I would predict from our studies that a decrease in estrogen would cause, in women, some decline of cognitive performance around certain kinds of memory."

If we tie our sense of sexual vitality to youth and vigor, as our bodies begin changing we may fear the loss of our sexual selves, and some of us do lose our partner's interest at this time. Generally this occurs not because we've become unattractive, but because we reflect back to him his own aging process. To deny his aging and confirm his virility, many men seek out a younger woman. While it is probably not hormonally based, this is the male menopause we hear so much about.



Photographic illustration by Ron Brown © 1-800 992 3801. See table of contents, too.

I was a sandalmaker during the golden age of gladiator movies. While Victor Mature, drenched in lion slobber, leered at the prelate's consort in a thousand theaters, I was in a little shop in the carriage house of the Brattle Inn, Harvard Square, hair to my butt, holding a mouthful of clinching nails, cobbling thigh-high Roman footwear for tenured professors to wear beneath their Harris tweed trousers. Business was good.

Business was too good. At twenty-two bucks a pair, custom fit, fourteen days lead time, Byron and I were selling sixty pairs a week. We were building fifty. That left ten disappointed foot fetishists per week, ten folks to whom I could not explain that Leary and Alpert and Harvard University had paid me to drink dropper-dosed water, how the water allowed me to mind-read the entire clientele of Mrs. Bartley's Burger Cottage simultaneously, how the water washed law school from my soul and made me regard ants as equals. Rather than disappoint our customers, we invented Herb.

Herb was an unanswered phone. When a gladiator-to-be showed at the shop, and we were not prepared to deliver the goods, Byron and I found that we could assuage our guilt, and demonstrate to the customer that we were, indeed, dedicated businessmen, by dialing one of our home numbers, then ranting and raving at the ring signal in an empty house, asking Herb why Mr. So-and-so's sandals, which we'd sent to Herb for final polishing, were not in our shop, not ready on the date we had specified. We'd give Herb the "or else" option, apologize to the customer, and ask him to come back in a couple of hours, after we had retrieved his sandals from Herb. It took us two hours to make a pair of sandals from scratch.

The Irish can make a party out of anything. One spring morning in 1963, Colleen Mahoney, secretary to the president of the Maine Potato Growers' Association, entered our shop and asked if we were capable of making a leather potato. Her boss had decided to retire on the 118th anniversary of the Irish Potato Famine, and she needed something a bit unique as a present. Aye, sure we could build a tuber of leather. Could she be coming back in two weeks?

Two weeks later, just before lunch, there she was again. I panicked, grabbed the phone, and got brutal with Herb, threatening to terminate his employment with us if he didn't finish the Mahoney job soon, and have it in our shop within two hours, at the latest, by God. Colleen had a bit of shopping to do in Boston. She granted us three hours. Byron and I went to lunch.

Our lunch was Kantian in its routine. Every noon, year around, we bought two fried-egg sandwiches, mine with sweet pickles, his with catsup, and two cartons of chocolate milk, from the same woman in the same diner, ate them beneath the same tree beside the Charles River, then played high-fly-ball catch with the same softball, in the sun, snow, or mud. Neither of us questioned the monotony of our habit. Lunch tied us back to the Midwest, to our lives before Mad Dog, codeine, amyl nitrate, the devil weed, and, now, lysergic acid. We needed those fried-egg sandwiches.

On the day of Colleen's return, Byron launched a ball into the midday sun. I misjudged the trajectory. The ball boinged off the paved bicycle path beside the Charles, then plopped into six inches of April-in-Cambridge muck. I was smitten with creativity.

We soaked the softball in the river, then took it back to our shop, squeezed it in a bench vise, beat it into a spuddy lump with the blunt end of a splitting maul, pecked eyes into it with an Osbourne punch, dipped it into a vat of antique brown dye, waxed and polished it, and sold it to Colleen for twenty dollars. She was happy. I know that someday I'll have to pay her back.

As she was leaving the shop, Colleen lifted a finger to me, and said "I'd be thinking again about the way you treat this Herb fellow. He does stitch so beautifully."



J.D. Smith lives more or less unobtrusively in Weston, Oregon. Contact him through WER for writing projects.

How to Tell When You're Tired

It's a good little book about working for a living. The author was a fruit packer, then a stevedore on the San Francisco docks. His observations draw on about forty-five years' experience in those and other forms of work, and on his close examination of working-stiff, union, management, and government behavior. (As you might expect, this behavior runs to 90 percent folly and 10 percent brilliance.)

Reg Theriault is no radical (hey, he belongs to a powerful union: why would he be?), and he's not an apologist for any of the "sides" involved. He makes a good case for greatly increased worker control over production. But I think most of the book's value is in its anecdotes. As good books will, this one articulates things I knew but had never contemplated; it set me straight on a couple of misapprehensions, too.

—James Donnelly

- Work as punishment implies a curious equation. Punishment is society's response to a criminal act, and the sentence of "hard labor" was deemed the most severe punishment, short of death, that society could administer. Using this reasoning the vast multitudes of everyday workers all over the earth who were engaged in hard labor all the days of their lives might have asked what crime they had committed. None asked, of course, but presumption was clear: work is base and degrading and those who do it are equated with slaves and criminals and rightfully assigned to the lowest level of society. It was well into this century before the working classes of the world could shake themselves loose from this evaluation and cease subscribing to their own victimization.

- You may, as the slogan at the top of the shop bulletin board states, be a member of just one big happy family and be encouraged to drop suggestions for improvements into the box provided. You may be lured by stock offers (nonvoting stock, of course) to own a share of the business. But even if you have worked in the place for thirty years and all of your life, past and future, is wrapped up in the business, any demand you may make for some decision in running the company will be fought to the death, either yours or the company's.

- After you get your coffee you can stand around and talk to each other or go inside a small coffee room and try to find a seat on a crowded bench. Once inside the shack, a lot of the men immediately fall into the half-trance, half-sleep state that many workingmen seem to have acquired the

ability to slip into whenever they have a minute or two to escape from the job. A few men talk, and there is always the inevitable foursome that will try to play a hand or two of cards.

During the meal break it is the shack again for the men who pack their own lunch, or a cold sandwich if the coffee wagon is there. Most men jump into their cars and take off for a restaurant. If you work days, the nearest place to eat is three miles away. Ten years ago in both Frisco and Oakland there was a workingmen's restaurant at the head of just about every pier. Although the Port of Oakland is one of the larger container ports of the world, the incredible fact is that because of the automated nature of the work, there are not enough men employed in the several container operations there to support one eating establishment.

How Would Confucius Ask for a Raise?

Confucianism fosters social order. It encourages people to be shrewd, cautious, and flexible. What better teaching for today's business world?

*Forget the new-paradigm claptrap in the Preface and Introduction; go straight to the practical questions and answers in this sensible, level-headed work. Using the principles of the *I Ching* — which Confucius himself consulted for guidance — Carol Orsbom gives advice that is invariably fresh, practical, and compassionate.*

Orsbom doesn't sugarcoat her advice. She believes that life is tough, and a mature individual needs to face it full on, sometimes advancing, sometimes retreating, sometimes taking responsibility for failure.

*Next time I need to make a tough business or career decision, I'll probably take a look at *How Would Confucius Ask for a Raise?* —Richard Smoley*

- Tough Business Problem #57

Our company has undergone a much-needed reorganization. My friend got laid off, while I got promoted. I'm sad for him but pleased for myself. Now he's pressing me to quit. Is he right?

The Lesson of the Australian Crab

In Australia there is a certain type of crab used for fish bait. Once caught, they are kept in open buckets on the pier.

These crabs are excellent climbers. Any one of these crabs could easily crawl up the side of the bucket and over the edge to freedom. But the fishermen don't need to worry about this.

Why?

That the crabs don't escape is not for lack of trying. One crab or another is always on his way up, scrambling toward the light.

However, as soon as the crab separates himself from the pile and makes a run for it, the other crabs reach out for him and pull him back down. No crab has ever been known to escape.

Yet.

- The Good Enough Human Being's Bill of Rights

1. Even if I fear that I am greedy, stupid, foolish, emotional, lazy, and bad, I deserve to have bosses, clients, suppliers, family, friends, and subordinates who respect me.

How to Tell When You're Tired

(A Brief Examination of Work)

Reg Theriault.

1995; 188 pp.

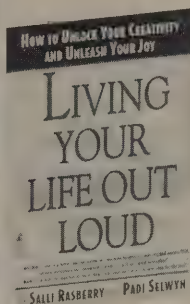
ISBN 0-393-03878-5

\$18 postpaid. W.W. Norton & Co.,
Order Dept., 800 Keystone Industrial
Park, Scranton, PA 18512; 800/233-4830



Living Your Life Out Loud

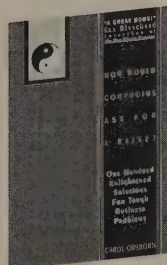
This new book by Salli Rasberry and Padi Selwyn will help you dust off the creativity inside you. There's even a table estimating the days, hours, and minutes left in our lives to be creative. *Living Your Life Out Loud* suggests thinking of your life as a work of art, a canvas. You choose the colors to paint, and the design to be created. —Sonda Früdden



Living Your Life Out Loud

(How to Unlock Your Creativity & Unleash Your Joy)

Salli Rasberry. Pocket Books,
1995; 251 pp. ISBN 0-671-89805-1
\$12 postpaid. Simon & Schuster,
Order Dept., 200 Old Tappan
Road, Old Tappan, NJ 07675;
800/223-2336



How Would Confucius Ask for a Raise?

(One Hundred Enlightened Solutions for Tough Business Problems)

Carol Osborn. 1994; 331 pp.

ISBN 0-380-72250-X

\$11 (\$12.50 postpaid). Avon Books,
PO Box 767, Dresden, TN 38225;
800/223-0690

2. I have the right to protect myself from exploitation.
3. I can take a stand for myself and my beliefs and let the world march to the beat of my drum for a change.
4. I matter.
5. The universe loves and supports me — exactly as I am.
6. The universe has plans for me better than anything I've yet imagined for myself.
7. I trust in the universe and in myself and am grateful for all that has been given to me — as painful as it has been — because it has brought me to this moment.
8. I am a force to be reckoned with.
9. If you don't support my bill of rights with all your heart and all your soul and all your might, then clear out of my way.
10. I trust in the magic and miracle of my life, and no matter how sad and scary it is to leave the familiarity of being abused behind, I look forward with joyful anticipation to what's next.

Tough Business Problem #87:

I've got a report due tomorrow. To finish it on time, I'll have to miss my child's third-grade play. She's only in the chorus. What should I do?

Consider:

WHICH CHOICE WILL HAVE
THE GREATER RAMIFICATIONS
FIVE YEARS FROM NOW?

■ The difference between creative people and those who are not is purely a matter of self-perception. If you perceive yourself as creative, you are, and if you don't, you won't be.

● Time doesn't exist for me; it melts. Can't keep watches on my wrist. They break, stop, slip off, disappear. I do not watch time; time watches me.

I think my soul was born so long ago that "now" lacks meaning.

Dr. Sprague locked his door against latecomers. Mornings spent with ear to keyhole chastened, but did not change me.

I have been on time from time to time. I caught the midnight train to Venice, met my sweetheart under the clock at the Biltmore, pruned plantings when expected.

Time runs more slowly in hot climates.. In California, Lucky Lou Lovedivine said, "Waiting for hippies is like bleeding to death."

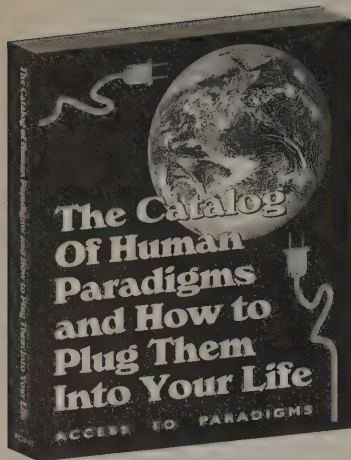
Jonathan Z. Smith wrote a thesis on time that was brilliant, intricate, and a thousand of pages long. He buried it. A lesson on time.

To understand the importance of time, watch carrots growing.

The minute that times a labor contraction, the minute that your lover takes to look at you, the minute that delivers hallucination or enlightenment, the minute between the blowing of the whistle and the rumble of the train — these minutes are not time; they are the suspension of time.

What is happening now, now, now? Can't step in the same river twice; rivers, anyway, are for floating in.

—Delia Wheelwright Moon



Access to Tools

A proposal for the
Whole Earth Catalog's next phase

BY ROGER HYDE

Composer Roger E. Hyde has been an occasional Whole Earth contributor for twenty-two years. His consistent foci have been the philosophy of art and communications theory. He is looking for a publisher for his novel *The Weighing of Secret Burdens*, and his theoretical tome *A General Poetics* is nearing completion, but he says not to hold your breath in anticipation of either. However, you may expect to find a fairly amazing Hyde essay, on music as an evolutionary system of knowledge, in these pages in the near future.
—James Donnelly

WE ARE PROBABLY BETTER OFF WITH RESPECT TO "ACCESS TO TOOLS" than at any other time in the evolution of our species — at least since we were unicellular, when we doubled the scope of our world by simply dividing. "How to" will remain an uncompletable task as long as we persevere by reproducing and dying. Every heir needs to get into "how to" to get up to speed and take a turn. *The Whole Earth Catalog* is arguably a crystallization of the state of our capacity to share the collective toolchest.

"How to" evolves into "How to *what?*" — which was the implicit theme of the WEC. We seek a clear sense of the tasks to be taken up: "Community," "Nomadics," "Learning": we pile up the tools near the tasks. Sometimes we feel sure of what needs to be done — fix the schools; retire the debt; eliminate poverty, disease, abuse — but this clarity comes and goes.

Dedication to the tasks implies dedication to the tao of the work. Meaning: we endorse the direction, the polarity, of the energy. We apply energy in the direction of physical health, mental and emotional health, environmental health, integration of the human community, expansion of the collective human capacity (physical, intellectual, spatial). While our feeling and aspiration are implicitly on record, perhaps here is the place to reapply ourselves. Where we arrive at our statements by implication, that seems to be the place we solidify our coevolution by making the implicit explicit, and therefore fully conscious, and thereby an assertion of true volition. (The ultimate function of philosophy is to transmute the felt impulse into the conscious, dedicated policy.)

The Myth of the Machine

Lewis Mumford performs the astounding intellectual feat of tracing the interwoven strands of history, technology, and anthropology, back to where today's technology-dominated world probably started. He contends that the historical overemphasis on tangible artifacts has blinded us to the central invention that made modern technology possible: the horrific and bountiful social innovation Mumford calls 'the megamachine.' This thirty-year-old book is the existence proof of the hypothesis that intelligent technology criticism is possible. —Howard Rheingold

The irrational factors that have sometimes constructively prompted, yet too often distorted, man's further development became plain at the moment when the formative elements in paleolithic and neolithic cultures united in the great cultural explosion that took place around the Fourth Millennium B.C.: what is usually called 'the rise of civilization.' The remarkable fact about this transformation technically is that it was the result, not of mechanical inventions, but of a radically new type of social organization: a product of myth, magic, religion, and the nascent science of

astronomy. This implosion of sacred political powers and technological facilities cannot be accounted for by any inventory of the tools, the simple machines, and the technical processes then available. Neither the wheeled wagon, the plow, the potter's wheel, nor the military chariot could of themselves have accomplished the mighty transformations that took place in the great valleys of Egypt, Mesopotamia, and India . . . I found that what economists lately termed the Machine Age or the Power Age had its origin, not in the so-called Industrial Revolution of the eighteenth century, but at the very outset in the organization of an archetypal machine composed of human parts.

Two things must be noted about this new mechanism, because they identify it throughout its historic course down to the present. The first is that the organizers of the machine derived their power and authority from a heavenly source. Cosmic order was the basis of this new human order. The exactitude in measurement, the abstract mechanical system, the compulsive regularity of this 'megamachine,' as I shall call it, sprang directly from astronomical observations and scientific calculations. This inflexible, predictable order, incorporated later in the calendar, was transferred to the



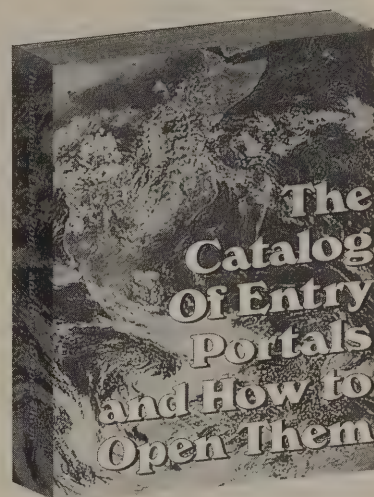
I believe I have just said this, though obliquely: "How to" finally requires growing up into "Why." *The Why Catalog* collects the possible reasons to act. Who has asserted answers among us? How do we examine their suggestions? How strong is the consensus defining "growth" or "health" of a specific sort?

Our cultural institutions that seem to be the bodily organs that excrete the philosophical endocrinology are not examined in 1990s America (are they elsewhere?). The great universities, the legislatures, the high courts, the ordained leaders (Nobel laureates, Pulitzer laureates, Oscar winners) are not called upon to philosophize in our era. If they produce philosophy it circulates unconsciously, is dispensed like hormones in a process where reflex governs. "Unconscious philosophy" may be an oxymoron, but we are culturally committed to living that way. Ask the single key question: Why does no one in America explicitly function under the primary job title "Philosopher?"

"Access to tools" is a concept, an aspiration that evolves and matures also; not only in where it jumps off to other ideas, but within itself. "Tools" begin at a simple level — screwdrivers, pumps, computers — transducers of energy into motion, levers to apply movement to matter. But the transduction, the transmutating process, becomes applied to larger and more sophisticated works. "Access to tools" becomes "access to methods," then "access to philosophies," and ultimately "access to paradigms." How about *The Catalog Of Human Paradigms and How to Plug Them Into Your Life*? It would include, in the proven style, how to explore step by step the organized and disorganized religions, scientific traditions in various disciplines, the philosophies and methodologies for health care and maintenance, becoming a part of the momentum in various musical, literary, and artistic traditions, etc. *The Catalog of Entry Portals and How to Open Them*.

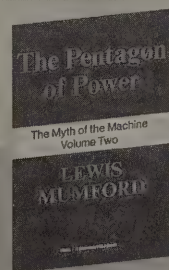
Well, think about it. ☺

**"Access to tools"
becomes
"access to methods,"
then
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regimentation of human components. As against earlier forms of ritualized order, this mechanized order was external to man. By a combination of divine command and ruthless military coercion, a large population was made to endure grinding poverty and forced labor at mind-dulling repetitive tasks in order to insure 'Life, Prosperity, and Health' for the divine or semi-divine ruler and his entourage.

The second point is that the grave social defects of the human machine were partly offset by its superb achievements in flood control and grain production, which laid the ground for an enlarged achievement in every area of human culture: in monumental art, in codified law, in systematically pursued and permanently recorded thought, in the augmentation of all the potentialities of the mind by the assemblage of a varied population, with diverse regional and vocational backgrounds in urban ceremonial centers. Such order, such collective security and abundance, such stimulating cultural mixtures were first achieved in Mesopotamia and Egypt, and later in India, China, Persia, and in the Andean and Mayan cultures; and they were never surpassed until the megamachine was reconstituted in a new form in our own time. Unfortunately these cultural advances were largely offset by equally great social regressions.



The Myth of the Machine
(Vol. 2: The Pentagon of Power)
Lewis Mumford. Harvest Books,
1970; 496 pp. ISBN 0-15-671610-0
\$19.95 (\$23.95 postpaid). Harcourt Brace
Trade Dept., 6277 Sea Harbor Drive,
Orlando, FL 32887-4300; 800/543-1918,
fax 800/874-6418

Neo-Techno-CRYPTO-CYBER-LUDDITES

SURVEY BY HOWARD RHEINGOLD

Rejecting modern technology might be the answer for some people — usually those affluent enough to lead an ecologically sustainable life. But if we are going to steer toward a sustainable planet without the sudden death of most humans, we are going to have to continue to depend on computers and communication-based technologies to keep our cities, hospitals, sewage systems, and food supply lines operating. Right now, we need thoughtful, worldwide dialogue about where we ought to go with technology over the next five to fifteen years. We need a theory of appropriate technology that concedes the powers and capabilities of communication media. We need good critics. We need more critical thinking from those of us who embrace and endorse technology.



Silicon Snake Oil

Cliff Stoll's bestselling autobiographical whodunnit, *The Cuckoo's Egg*, chronicled Stoll's efforts to alert US law enforcement authorities to the existence of a KGB computer cracker. It was a terrific story of intellectual detective work and bureaucratic intrigues. And the book carried an important ethical message concerning the way we use technology.

Computer networks, Stoll eloquently demonstrated, are built on trust. If too many people crack too many computers, and too many people begin to mistrust the medium, global many-to-many communication will lose its value.

Stoll's current effort is again autobiographical, but this time, there is no story. Just a theme: computer/online enthusiasts should turn off their computers and get a life. Stoll raises important questions about the way many people abuse their enthusiasm for the cyber-life, and his plea to unplug is one worth making. Certainly, educators should be wary of technological enthusiasm: no technology offers a solution to the problems of education as a social institution. But for the physics wizard in a remote Yukon town with a basic schoolhouse connection to the Net, the AIDS caregivers who find online support, the lonely, perhaps suicidal gay teenager, the disabled, elderly, or just plain frightened people who rarely leave their apartments after dark, the Net is a lifeline. Certainly, we should look at inflated claims of technological utopia with a skeptical eye, but unless one is gifted with omniscience, I don't see what qualifies any mortal to judge the quality of another person's life.

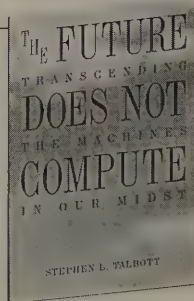
Silicon Snake Oil (Second Thoughts on the Information Highway): Clifford Stoll. Doubleday & Co., 1995; 247 pp. ISBN 0-385-41993-7. \$22 (\$24.50 postpaid). Bantam, Doubleday, Dell, Fulfillment Dept., 2451 S. Wolf Road, Des Plaines, IL 60018; 800/323-9872.

The Future Does Not Compute

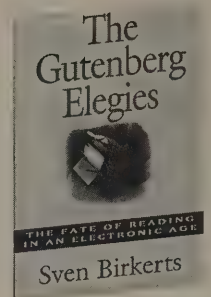
It is not entirely fair for me to critique Steve Talbott's work, because he uses my writings extensively as a foil and sometimes, in my opinion, as straw men. He does understand the attraction of online technology, and his analysis of what is wrong with surrendering to the cyber-imperative is thoughtful and strong.

Talbott dives deeper than Birkerts and Stoll, and I found myself rooting for his book to succeed. But every weak argument and less-than-necessary tangent or rumination blunts the impact of those arguments that do hit home.

The Future Does Not Compute: Steve Talbott. 1995; 481 pp. ISBN 1-56592-085-6. \$22.95 (\$25.95 postpaid). O'Reilly & Associates, 103A Morris Street, Sebastopol, CA 95472; 800/998-9938, fax 707/829-0104.



The Gutenberg Elegies



I agree with Ivan Illich's observation in *The Alphabetization of the Popular Mind* (WER 64:122) that symbolic communication media exert strong mojo on the way people think. Plato was correct in predicting that alphabetic writing would signal the end of a long era of orally trained intellectual vigor. McLuhan certainly knew that "electric media" were rearranging nations and human perceptions. My suspicions that online media are changing the way we think and perceive predisposed me to become enthralled by Sven Birkerts' romantic description of the intensely rich virtual reality that enthusiastic book-readers create in our heads.

Having allowed myself to get caught up in the eminently readable confessions of an ardent reader, I found myself growing skeptical and vaguely depressed when Birkerts began critiquing the vast world of online communication. It was clear that he didn't understand the technology he was criticizing and had personally explored only a small portion of it. Birkerts' lack of fascination with new-fangled information technology saved him from the mindless enthusiasm for all things cyber-related that has captured so many of his contemporaries. But his revulsion created another blind spot: he fails to understand the true attraction and some of the strengths of the technology he rejects.

The Gutenberg Elegies (The Fate of Reading in an Electronic Age): Sven Birkerts. Fawcett Books, 1994; 256 pp. ISBN 0-449-91009-1. \$12.50 (\$16.50 postpaid). Random House, Order Dept., 400 Hahn Road, Westminster, MD 21157; 800/733-3000.

Resisting the Virtual Life



Better books remain to be written, but this is an excellent start for enthusiasts who aren't afraid to question their own assumptions about technology, and for those who feel uneasy about technology and seek a sound intellectual framework for articulating their unease.

This anthology of short pieces has an advantage over the other anti-Net books. It's easier to hide the defects in your argument if you don't stretch it over the length of a book. Not all the authors of this volume hit the mark, and you have to put on appropriate filters when dealing with the neo-Marxists among them, but these essays ask questions that Stoll and Birkerts fail to ask, and often do so more clearly than Talbot. Is the price of progress ultimately going to be a kind of enslavement to the super-sonic, air-conditioned, real-time world we've created? Are the technologies we now embrace likely to lead to the loss of privacy, increasing government or commercial control of our thoughts and bodies, constraints on our freedom of expression and choice?

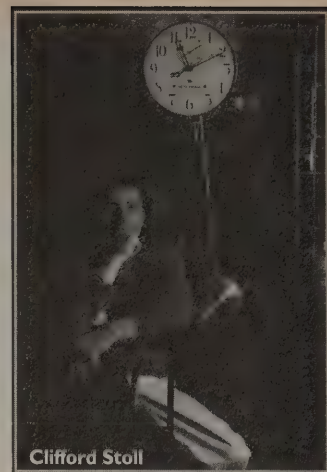
I don't agree with everything in this book. In particular, I still hope that a knowledgeable and communicative population of activists and community-builders will succeed in demonstrating the democratic potential in tools such as the Internet, the World Wide Web, and virtual communities. But the parts I did agree with are disturbing enough to force me to examine my own prejudices.

Resisting the Virtual Life (The Culture and Politics of Information): James Brook & Ian Boal, Editors. 1995; 278 pp. ISBN 0-87286-299-2. \$15.95 (\$18.45 post-paid). City Lights Books, 261 Columbus Avenue, San Francisco, CA 94133; 415/362-8193, fax 415/362-4921.

■ Maybe we're obsessed with computers as tools because, as Thomas Carlyle wrote, man is a tool-using animal . . . without tools he is nothing, with tools he is all.

And so everything within our scope becomes a tool. Advertisements promote pens, dictionaries, and word processors as writing tools. I search in vain for something that isn't a tool: my shoes are personal-transportation tools, chewing gum is a relaxation tool, and the moon is a tool for telling time and illuminating the evening.

But I've never heard of a typewriter user's group, or schools spending thousands of dollars to put a radial-arm saw on every student's desk. Nor do I know of any screwdriver that inspires the same slavish infatuation as the Internet. —*Silicon Snake Oil*



Clifford Stoll



Sven Birkerts

■ The complexity and distinctiveness of spoken and written expression, which are deeply bound to traditions of print literacy, will gradually be replaced by a more telegraphic sort of "plainspeak." . . . Neil Postman and others have already suggested what losses have been incurred by the advent of telegraphy and television — how the complex discourse patterns of the nineteenth century were flattened by the requirements of communication over distances. That tendency runs riot as the layers of mediation thicken. Simple linguistic prefab is now the norm, while ambiguity, paradox, irony, subtlety, and wit are fast disappearing. In their place, the simple "vision thing" and myriad other "things." Verbal intelligence, which has long been viewed as suspect as the act of reading, will come to seem positively conspiratorial. —*The Gutenberg Elegies*

■ [H]uman community in some form or another will naturally take hold of whatever mechanisms we create for expression and communication — whether car and road, telephone, computer network, or even the television talk show.

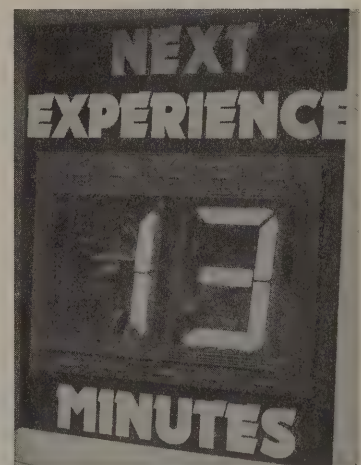
In most cases, the physical media are not likely to become identified in our minds with the very substance of community itself. But have you noticed how easily "network" now seems almost to imply "community" — as if a set of electronic connections automatically constituted community? The phrase "net communities" captures this well, for its meaning slides effortlessly between "a matrix of communication channels" and "communal human exchange."

There is no doubt that physical networks will dramatically affect the forms of our communities. But if we fail to distinguish radically between such networks and the personal sources of community, then the only sure thing is that we will continue to degrade what community remains. —*The Future Does Not Compute*

■ Corporate data flows, Hollywood films and TV programs, business statistics, home gambling, video games, virtual reality shows, and shopping channels are the likely fare on the new electronic circuitry.

Yet there is at least one cloud on the market-forces horizon: the question of how this corporately organized world will be governed. If national authority continues to decline and corporate resource-allocation and general decision making continue to grow, and the welfare of approximately two-thirds of the world's population goes unattended and even deteriorates, what will prevent these conditions from provoking large-scale political convulsions in one place after another? And how can the globally privileged, wherever they may be, insulate themselves from these inevitable upheavals? What authority can check these powerful centrifugal currents?

—*Resisting the Virtual Life*



Sign outside a simulated earthquake attraction in San Francisco's Pier 39. —*Resisting the Virtual Life*

Life on the Screen

Finally, hallelujah, a social critic of technology who actually understands her subject, and who is capable of perceiving shades of gray and of hearing more than one note. Finally, hallelujah, somebody to give us some tools for figuring out what it means to live online. Sherry Turkle is a patient scientist who gathered data for fifteen years for this book. She's also an excellent writer who communicates a lucid if chilling picture of the way our cybercreations are warping what it means to be human.

Turbine engines and railroads were objects-to-think-with that helped the nineteenth-century public to integrate images of the industrial revolution, and thus find ways to deal with the immense changes in their lives. The "Freudian slip" was an object-to-think-with at the beginning of this century that helped people integrate the idea of unconscious parts of the personality. Turkle points out ways that computers and networks are objects-to-think-with for a postmodern era. She claims, and offers evidence to support, a new way of looking at the human-computer relationship: the world of simulation languages — things like icons, which teach us to think in terms of surfaces and simulations. *Life on the screen* invests us with an object-to-think-with that is helping us to integrate new images of what it means to be human. We are learning to feel comfortable about coexisting and conversing with intelligent machines. Here is where a new social criticism of technology can start.

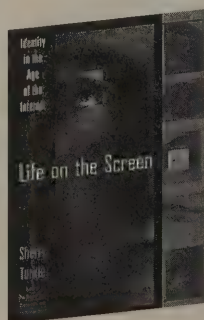
—Howard Rheingold

■ Fredric Jameson wrote that in a postmodern world, the subject is not alienated but fragmented. He explained that the notion of alienation presumes a centralized, unitary self who could become lost to himself or herself. But if, as a postmodernist sees it, the self is decentered and multiple, the concept of alienation breaks down. All that is left is an anxiety of identity. The personal computer culture began with small machines that captured a post-1960s utopian vision of transparent understanding. Today the personal computer culture's most compelling objects give people a way to think concretely about an identity crisis. In simulation, identity can be fluid and multiple, a signifier no longer clearly points to a thing that is signified, and understanding is less likely to proceed through analysis than by navigation through virtual space.

■ A decade after [Fredric] Jameson wrote his essay, postmodernism has found its objects. I interview a fifty-year-old engineer, a Caltech graduate, whose basic commitment has always been to "make things, build things from the ground up, analyze the hell out of stuff." In the terms I have been using here, he has fully lived in the modernist aesthetic. He tells me that the Internet and the World Wide Web have blown him away. "It's like a brain, self-organizing, nobody controlling it, just growing up out of the connections that an infant makes, sights to sounds . . . people to experiences. . . . Sometimes I'll be away from the Web for a week and a bunch of places that I know very well will have 'found' each other. This is not an engineering problem. It's a new kind of organism. Or a parallel world. No point to analyze it. No way you could have built it by planning it."

Life on the Screen

(Identity in the Age of the Internet)
Sherry Turkle. 1995; 464 pp.
ISBN 0-684-80353-4. \$25 postpaid.
Simon & Schuster, Order Dept.,
200 Old Tappan Road, Old Tappan,
NJ 07675; 800/223-2336



Galatea 2.2

Richard Powers (*Three Farmers on Their Way to a Dance*, *The Gold Bug Variations*) is as ambitiously intellectual as any novelist writing today. His books bubble over with Big Ideas: The meaning of meaning. The ends of love (and the ending of loves). DNA parsing and the architecture of Bach. Artificial intelligence, posthumanist literary criticism. The absurdity and necessity of storytelling at the end of a long, brutal century.

His ideas are dressed in extravagant, interlaced plots. The philosophy is interwoven with humor, audacious wit, and characters I care about even when they seem incapable of caring about themselves.

In *Galatea 2.2*, an acclaimed but blocked novelist (named Richard Powers) accepts a Turing-Test challenge: to create a computer neural network able to pass an English literature Master's exam. Like *Pygmalion* and the statue Galatea, he is drawn into an unexpected bond with the matter he is manipulating. But where, in those 65,536 parallel computers, is the "Helen" that engages him? What — who? — is the Helen he talks to, tries to impress, fights to protect? If what he loves in Helen is simply a projection he casts onto a mimicking of intelligence, is that so different from the dynamics of his failed human loves? Meanwhile, the power and limitations of Helen's language and intelligence are reflected and illuminated by characters in parallel plots, including a Down Syndrome child, a woman ravaged by stroke, and the narrator himself, isolated in a foreign village that speaks a dialect he cannot understand.

That's just a glimpse of the book's richness. It's challenging, delightful, sometimes heartbreaking. It's Richard Powers, at it again. —Michael K. Stone

■ Lentz almost spit in mid-clause. "Marcel. I have to grant you. She does have a disconcerting ability to pull appropriate quotes."

"Lentz! Listen to her. You think those are just quotes to her?" I felt myself getting hysterical. "What if they're real? What if she means something by them?"

"What if my grandmother had had testicles?"

"She'd be your grandfather," Helen reassured him.

I stared at Lentz's face, where a stain of dismay spread over the icy deep.



Galatea 2.2

Richard Powers. Farrar, Straus & Giroux, 1995; 329 pp. ISBN 0-374-19948-5. \$23 (\$27.25 postpaid). Putnam Publishing Group, Consumer Sales Dept., PO Box 12289, Newark, NJ 07101; 800/631-8571

Something was screwy with the way B passed symbolic tokens among its levels. It might grow knowledge structures forever, as fecund as a field tilled with representational fertilizer. But its knowledge about knowledge would remain forever nil. And no patching or kludging on Lentz's part could set it right. B's deficiency seemed to be a by-product of the way its constituent nets spoke to one another. The way we'd linked them into the grand schematic.

We postponed the inevitable for as long as we could. I came into the office one evening and found Lentz behind his desk, inert. "I want to change the architecture." Ahab, well out of port, announcing the slight broadening of plans.

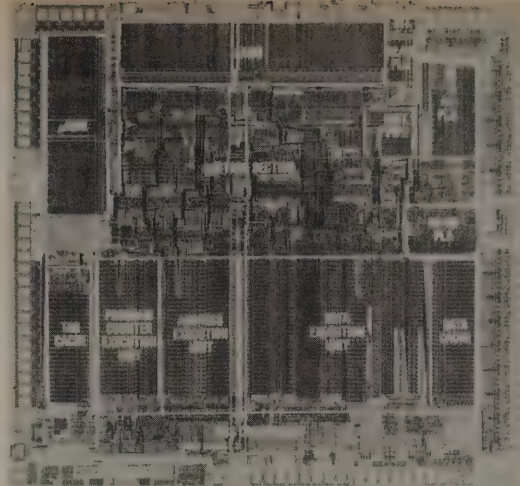
"Her architecture is such that severance could be effected with great deal of local selectivity."

"I don't believe you said that. You want to cut into her? You want to lobotomize?"

"Easy, Marcel. We're talking about a painless operation, as far as I imagine. We could get what is unattainable in any other arena. Isolate the high-level processes by which she maps complex input and re-assembles responses. Analyze them. Correlate various regional destruction with changes in —"

"You don't know it would be painless, Lentz."

He fell back against the cafeteria chair and studied me. Was I serious? Had I lost it, gone off cognition's deep end? I saw him find, in my face, the even more indicting idea that I didn't voice: that hurting Helen in any way would be wrong.



MC68020 processor, used to write this book, magnified 20X.

Digital Woes

The title gives it away. Software is buggy, software makes life-and-death decisions, software should not be trusted.

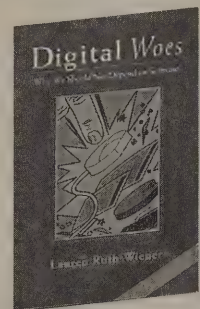
The author makes her point by citing examples of software failing catastrophically. The tales are sobering and well documented. This is an excellent introduction to the problems of complex software systems.

Should we trust systems that are too complicated for us to understand? Are life-and-death decisions best left to humans or machines?

Unfortunately, software performance is never compared with human performance. While software may be dangerous, it may also be the best game in town. —Patrick Tufts

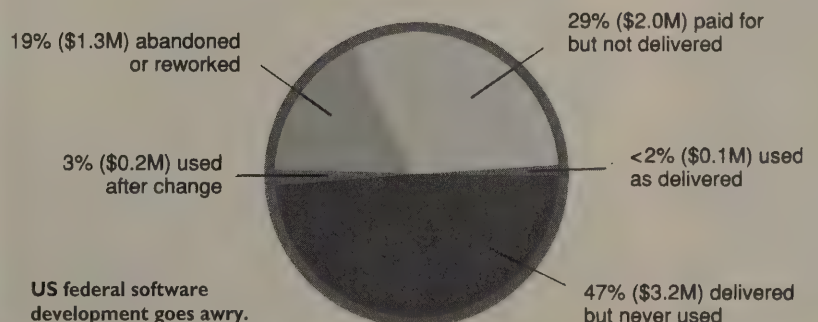
We May Not Gain Much.
In February 1990, an article appeared describing "a seeming reversal of progress": The Washington State ferry system announced that it planned to replace the electronic control systems of the large, Issaquah-class ferries with pneumatic controls. Ferries with electronic controls had rammed the dock, left before being told to do so, or unexpectedly shifted from forward to reverse. The folks in charge had had enough.

Washington State Ferries is the largest ferry transportation system in the United States; thousands of people in western Washington live on the Olympic Peninsula or the beautiful islands across Puget Sound from Seattle, and take the ferries daily to and from work. Under the circumstances, Washington State responsibly decided it did not need to run a poorly controlled experiment with the latest technology. Older pneumatic control systems, which require a physical connection from the control cabinet to the propellers and engine governors, had been doing the job before, and they'd been more reliable.



Digital Woes

(Why We Should Not Depend on Software) Lauren Ruth Wiener. Helix Books, 1993; 252 pp. ISBN 0-201-40796-5 \$14 (\$18 postpaid). Addison-Wesley Publishing Co., Order Dept., 1 Jacob Way, Reading, MA 01867; 800/447-2226



DRIVER'S HEAVEN & HELL

BY GEORGE LEONARD ©

1. The defining technological marvel of the twentieth century is not the computer or the space shuttle. It is the private automobile.
2. That almost everyone on this planet can learn to drive a car with little or no formal instruction testifies to the enormous potential of our species.
3. According to brainwave studies, it takes more brain power to drive a car on a busy freeway than to land a Lunar Excursion Module on the moon.
4. Driving makes you a stupendously trusting person. An oncoming driver's careless steering mistake, maintained for two seconds, could mean your death.
5. Hold the steering wheel with both hands as if you were holding two hummingbirds.
6. Let your center of mass merge with your car's center of mass.
7. Through your tires feel the texture and pressure of the surface beneath you.
8. Be aware of the energy field around your car. Note the inviolate safe area around you (*mai-ai* in the Japanese martial arts). Should any other car enter that space, prepare to restore *mai-ai*.
9. Create a 360-degree field of vision. Use all three rearview mirrors at frequent intervals.
10. Entering an expressway, take personal responsibility for the space in front, behind, and on either side of you. Own your space. Same thing on any other road.
11. On a long, straight stretch, look into eternity and consider the brevity of your days on earth. Drive with awareness, delicacy, and speed.
12. Driving faster than usual, sit back farther than usual. Press the small of your back into the seat back. Sit deep.
13. Avoid repeatedly looking at your passengers when talking to them. They'll hear you just as well and feel much more comfortable if you keep your eyes on the road.
14. Tailgate if you wish, but realize that you are buying a one-way ticket to one of the deepest circles in driver's hell. (See box.)
15. Make a list of every car you've owned or had access to since you were sixteen. Now you have a hologram of your personality, your passion, your public history, and your secret life.
16. The convertible is the most practical of cars. Top down, it can transport a refrigerator or a small tree. But the real reason it's more practical than a closed-in car is that the human life span is not 200 years.
17. A simple and clear definition of Enlightenment: the ability to drive for seven straight days without having a single critical thought about another driver.
18. Do it for a month and the canonization process automatically begins.
19. Remember, driving strips away all the masks of language and appearance, revealing who you are at the most intimate and elemental level. Happy motoring! 🍀

HELL ON WHEELS

The Tailgater is condemned to run on foot naked through all eternity poked repeatedly and painfully in the buttocks by a small, swift devil wielding a red-hot pitchfork and wearing a BMW t-shirt.

The Slowpoke who won't pull over for a long line of trailing cars is doomed to drive a shiny, stick-shift muscle car up a rutted, winding mountain road behind a flatulent mule train, forever and ever.

The Traffic-Light Runner must run an infinite number of traffic lights, each time smashing into a car occupied by friends and loved ones.

The Eye-Contact Freak is forced to drive with his head clamped to the right endlessly discussing bad movies with a car full of pretentious people while he struggles vainly to see where the car is going.

Alone

In 1934, Admiral Richard E. Byrd spent four and a half months by himself in a shack buried in the snow 123 miles from his home base on the Ross ice barrier in Antarctica. In the winter, when there is no sun at all for months. Where forty below is considered a warm spell. Where your mind can play tricks, particularly if the chimney is leaking carbon monoxide (but without the stove, you'll freeze to death). Where small mistakes are fatal. Where everything is astounding, beautiful. He got through it — just — writing all the while. It's a good read. —J. Baldwin

■ Thank heaven there is no lack of can openers. Corey had included at least a dozen, and they were scattered among the stores to avoid any chance of their being all lost at once.

■ Relax once in the polar regions, and the artificial wall of security which you have so painstakingly erected about yourself may give way without warning.

■ Panic took me then, I must confess. Reason fled. I clawed at the three-foot square of timber like a madman. I beat on it with my fists, trying to shake the snow loose; and, when that did no good, I lay flat on my belly and pulled until my hands went weak from cold and weariness. Then I crooked my elbow, put my face down, and said over and over again, You damn fool, you damn fool. Here for weeks I had been defending myself against the danger of being penned inside the shack; instead, I was now locked out; and nothing could be worse, especially since I had only a wool parka and pants under my windproofs.



Alone

(The Classic Polar Adventure)
Richard E. Byrd. Kodansha Globe, 1938, 1995; 309 pp. ISBN 1-56836-068-1 \$15 (\$19 postpaid). Putnam Publishing Group, Consumer Sales Dept., PO Box 506, East Rutherford, NJ 07073; 800/631-8571

Winterdance

The subtitle is *The Fine Madness of Running the Iditarod*. That "madness" says it all. I found it most instructive to read this and Admiral Byrd's *Alone* together. Both are tales of the frozen, self-chosen. Both flirt with terrifying beauty and imminent death. Both are full of self-induced troubles, self-assessment, self-flagellation, and immodest modesty. Both are, in their way, true in the best sense. Both make you wonder what you would have done, or, more dangerous, what you would do under the same circumstances, learning how to live with Earth's extremes. —J. Baldwin

NB: Animal lovers will probably not be amused by either tale.



Running on sea ice on Norton Sound.

● I was very hungry.

If it was good for the dogs, could it be that bad for me?

I was very hungry.

If it was good for the dogs, and I was becoming something very like a dog, could it possibly be bad for me?

And so I ate the meat patties, although as a last gasp of refinement I did not eat the corner of the patty that touched my fingers.

● "Tell me now, isn't this better?"

"What?" I had been looking at the dogs again.

"This — this way to live. With the dogs and the sled and the snow. Isn't it better this way than the way you live the other times?"

"Down below?"

He nodded. "All that. How can you live that way? I see it on television and I do not understand how you can live that way. Isn't this better?"

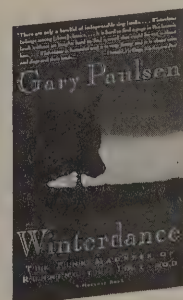
And I nodded. "Yes. It is."

"Good. You finish this goddamn thing and when it is done you get your woman and come back down the coast and live with us. We'll go hunting seals on the ice and your children will get fat and we'll sit and talk."

I smiled.

"You do that now. Come and live with us and leave that other way. It is no good."

It is an invitation that has never left me, is still alive when I think of the coast, the Bering sea.



Winterdance

(The Fine Madness of Running the Iditarod)
Gary Paulsen. Harvest Books, 1994; 256 pp. ISBN 0-15-600145-4 \$10.95 (\$14.45 postpaid). Harcourt Brace Trade Dept., 6277 Sea Harbor Drive, Orlando, FL 32887-4300; 800/543-1918, fax 800/874-6418

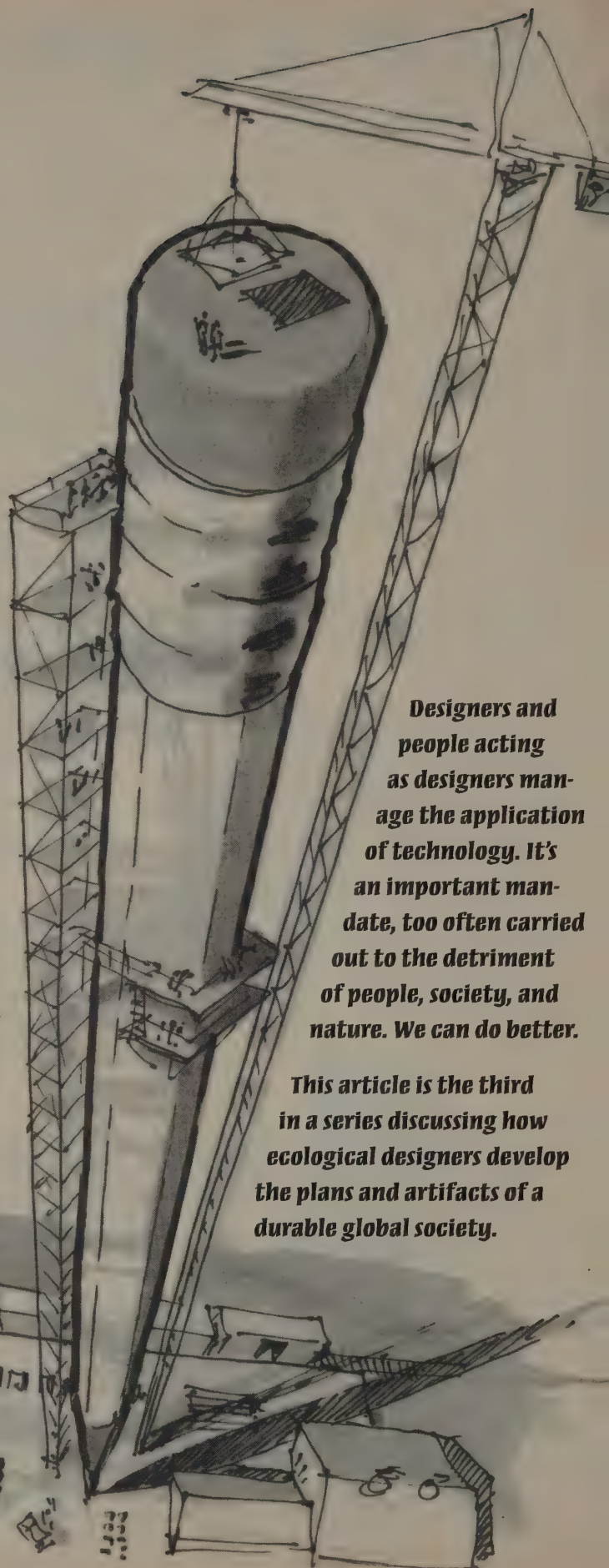


Stuff & Nonsense

BY J. BALDWIN

WHEN LAST SEEN, WE WERE DISCUSSING how one decides whether or not to do a proposed design. The decision depends partially upon your ethics and standards of personal integrity, and partially upon the design's likely effects on society and the environment. Any design — be it pure artistry or nuclear engineering — has a desirable aspect and a dark side. Even the most intellectual effort has physical consequences. Even supplying the poet with a pencil is a complex matter, as we shall see.

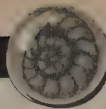
Everything is made of something. You, for example, have traces of all the elements aboard. You're just borrowing them for a while. Like all living things, you take in all sorts of molecular supplies, put them to work in various ways, then discard worn-out parts and other biological "exhaust" (some of it highly toxic). Nearly all of your cells are replaced every seven years or so (not all at once, of course). Fortunately, you are largely automated. If you weren't, you'd have to spend a lot of time consciously transforming yesterday's Caesar salad and tacos into eyelashes, skin, estrogen, and whatever else is needed for repair, replacement, and daily operations.



Designers and people acting as designers manage the application of technology. It's an important mandate, too often carried out to the detriment of people, society, and nature. We can do better.

This article is the third in a series discussing how ecological designers develop the plans and artifacts of a durable global society.

ILLUSTRATIONS BY
MALCOLM WELLS



If you were mechanical, you'd always be busy with repairs and preventive maintenance, unless you were deemed "disposable" after one use, like a paper napkin. All constructions, including you, degrade. All have a designed-in lifespan, after which they must be renewed, reconstituted, recycled, or left to decay. (Did you think God decided that cheap cars last about 100,000 miles? How many miles before *you* wear out?)

In your lifetime, you metabolically process about a thousand tons of materials in the form of food, water, and air just to stay alive. Because you're biodegradable, at death most of you becomes food for other beings. Eventually, your atoms and molecules go back on the shelf, ready for further use.

You use many more tons of materials in the form of products — t-shirts, gasoline, spoons, razor blades — and utilize many additional tons on a pro-rated basis as your share of bridges, movies, fire engines, and penicillin. In effect, you borrow all those materials, too, just as you borrow the stuff of life. Like your body's materials, a portion of the goods is "consumed" in the sense that it is not directly available for further use by people. The metal in your soup spoon could be recycled, melted down, and made into something else, but the energy used to melt the metal cannot be recovered.

Once energy has been turned into heat and work, it's gone for good — at least as far as being useful to us in our lifetime. That's the law of entropy at work.

Some of the goods you eat or use as products can be directly recycled, as compost or as the feedstock for another process or use: scrap paper, rags, and old cardboard are transformed into new cardboard. Some materials become "waste," or pollution, useful chemistry in the wrong place

at the wrong time at inappropriate concentrations. Remarkable molecules such as petroleum are degraded beyond further human use when burned or fashioned into throwaway items. Information is lost. More entropy.

An ecological designer deliberately strives for *syntropy* — the opposite of entropy. (Buckminster Fuller coined the word because he

"A few people killed here and there is the price you must pay if you want to drive around in cars." Some of the damage is deliberately don't-care. Most is inadvertent, and can be avoided or reduced by ecological design. The best ecological design is actually restorative, returning more than it consumes. In later columns, I'll get into that in detail.

"Waste" and pollution are useful chemistry in the wrong place at the wrong time at inappropriate concentrations.

considered "anti-entropic" to be a double negative.) A syntropic designer collects and adds information. Regenerative design is syntropic, cycling instead of degrading. Purists will object to calling this syntropy, because information and energy must be continuously added, but the addition is local in Universe. As one star dies, another is born. Everything, including entropy, is balanced, and it's part of an ecological designer's job to maintain the balance. Balance is different from compromise. Balance is natural and positive; compromise is always second-rate, and should be avoided. Sacrifice, except in the heroic sense, is just plain wrong, and is usually unnecessary.

Borrowing materials always has consequences. In natural systems, those consequences tend to stay in balance while swaying a bit in a vast dance of pulses, tides, and waves. In a technological society not yet integrated with nature (but which affects nature, nonetheless), balance is not often considered. Market-successful design may come at the cost of disastrous environmental and social damage. Some of the damage is written off with a callous shrug:

ALL DESIGN INVOLVES a desired physical effect, a choice of objects and materials, the know-how and tools to work those materials, energy (always energy), and a suitably skilled labor source to bring it about. Let's see how the design process goes for a simple item, the aforementioned poet's pencil.

The common pencil consists of the "lead" (it's actually graphite mixed with clay), the wooden body, the yellow paint, the lettering, the eraser, its ferrule, the plating and color stripe on the ferrule (if any), the shipping box, and the ink on the box. Anything else? Yes indeed; we've just started the list.

The pencil was made by workers operating several types of machines, which are themselves the result of design and manufacturing. The pencil was packed and shipped, typically to a wholesaler, then to a retailer, and finally by you to your place of work. That probably involved warehouses, a storefront, trucks with drivers, and you and your conveyance.

Are we done? Not even close. Back to the pencil: Where did the "lead" come from? Was it mined or manufactured, from coal or

petroleum? Either way, a mess was made somewhere, and trucks moved the ingredients to the pencil factory or its suppliers. What about the wood? Obviously trees are cut, processed into little pieces, and shipped. Then there's the paint. Most paint contains hydrocarbons, and that nice yellow pigment has to be made out of something — possibly a heavy-metal oxide. Paint manufacturing

The associated buildings and their maintenance, the energy supply, parking lots, white stall stripes in the parking lots, the cans *that* paint came in, the labels, the glue and ink on *those* labels, the workers' cars, the meter maids with their scooters, chalk, and retirement plans, all have environmental and social effects. Most of those things are not nearly as simple as pencils.

But Nature always does. No matter how complex the network of materials and processes we set in motion with our designs, Nature patiently, inexorably, automatically, inevitably, keeps perfect accounts of everything.

The interactions are preordained by the physical laws that govern Universe. They cannot be argued away for political or economic expedience, or by religious fervor. They'll happen just as surely as a dropped egg will splat on the floor every time (or a Challenger space shuttle with excessively chilled gaskets will fall from the sky). An ecological designer needs to keep accounts at the *least* for the materials and processes of what is being designed.

No matter how complex the network of materials and processes we set in motion with our designs, Nature patiently, inexorably, automatically, inevitably, keeps perfect accounts of everything.

and application are major sources of pollution. Paint needs a container, and the not-quite-empty cans are a significant source of landfill and water table contamination. The lettering is paint, too. That means another can and label (with glue and ink), and more storage, handling, and shipping.

The ferrule is probably recycled, low-grade metal, as it does not have to withstand heavy stresses. Nevertheless, it had to be formed and installed. For appearance (and satisfying chewability?) ferrules are plated, polished, and may have a decorative paint stripe. Plating is a notoriously poisonous business, and we already know about paint. All this doesn't amount to much per pencil. But multiplied by billions, no amount of anything can be ignored. Neither can the eraser and its several ingredients. As always, we must include packaging, warehousing, shipping, and personnel.

There's more: All the pencil makers, packers, shippers, and sellers have needs generated by their roles in the penciliferous world.

And there's one more small but potentially important thing: Pencils get shorter. Where do all their components go? People don't usually think about this. They should, because ignoring such matters (ignore-ance) leads to careless thought. For instance, "zero emissions," as applied to electric vehicles, is a deeply flawed and misleading term. Even if the electricity was totally clean, which it isn't, where do the tires go as they wear? Do they harm anyone or anything? Your car needs new brakes. Where did the old ones go?*

You could go on and on with this chain (like the misnamed food chain, it's actually a network), following it unto absurdity. How can a designer contend with these matters? Should a designer even attempt to consider all these effects? It's an impossible task. Nobody can keep track of all this!

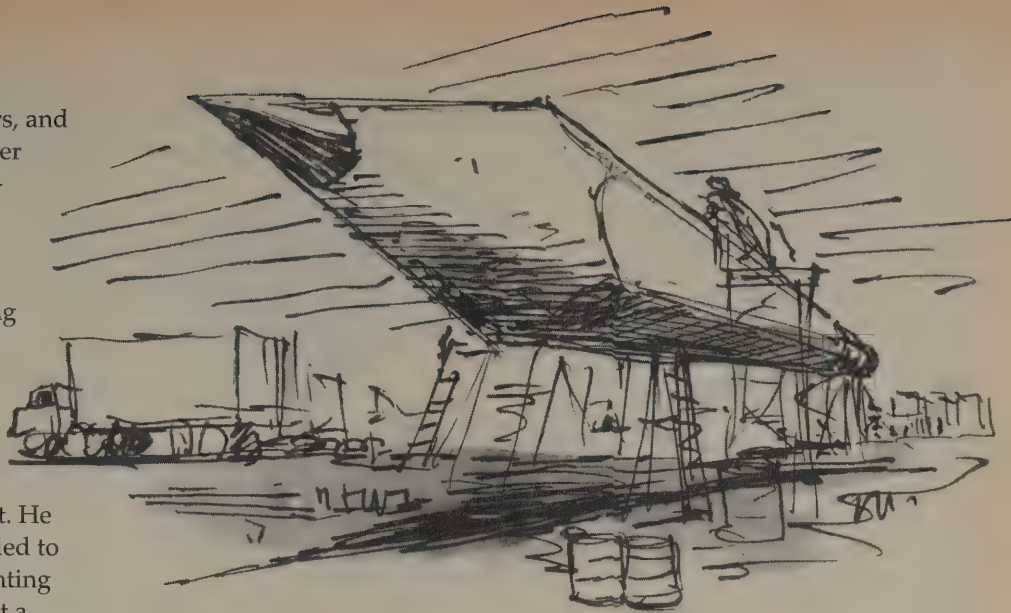
* As for pencils, I know where one bit went: it's imbedded in my leg. A Ticonderoga #2 was in my pocket when I slid into third base during fourth-grade recess in 1941. Good thing it wasn't real lead.

DON'T FEEL GUILTY, just be cautious. We're just beginning to learn how to develop the knowledge and wisdom to do better. Understanding the basic principles of ecology helps. So will some understanding of physics, chemistry, economics, and psychology. In other words, we need to think comprehensively — something our formal education ignores as it rewards specialization. As Gregory Bateson insisted, the connections — "the patterns that connect" — are as important as the objects of our attentions. Nature is always our second client, whether we care enough to deal with this or not. Assuming that the object to be designed has been deemed necessary and desirable, and you are pleased to do some designing, how do you choose the materials involved? Obviously, the poet can't worry about the pencil (though painters are increasingly concerned about the contents of their paints and solvents, and how that "sable" came to be in their best brush), but the designer of the pencil directly affects how

it looks, sells, writes, wears, and dies. An ecological designer will analyze the complexities of manufacture and distribution we have just belabored. It is a time for imagination and the setting aside of conventional wisdom.

In chapter 2 (WER 87:4), I described Bill Moss's PopTent, the first to use fiberglass rods for support. He got the idea when he needed to shelter his unfinished painting from a rain squall. He bent a couple of fishing poles (he was painting portraits of trout at the time) and slung a tarp across them. A product (and a new era of camping) was born. I assure you that Moss entertained no qualms about polyester resin or trout population dynamics in 1956. Now, we would. If after investigation you decide that the resin (and particularly the nasty hardener) is undesirable, what would you use instead?

There's always the traditional bamboo — still the material of choice for the most expensive flyrods — but that's old-mode and very expensive. It isn't very durable, and it has to be protected by some sort of chemically suspicious coating. Hmm. What about carbon fiber? Or how about — har, har — concrete? Concrete? Um-Hum. You can make a flyrod out of concrete; I've seen it done. Concrete is a tiny bit bendy. Pour fine concrete into a flyrod-shaped mold. Imbed a thin but strong tension cable in it, with a threaded portion sticking out of the butt-end. Think of it as mini-rebar. Wait for the concrete to cure (it doesn't "dry"; concrete curing is a chemical reaction). Then tighten a nut on the protruding threaded tip of the cable, squeezing the concrete. It's called "prestressing." The rod will be flexible — downright whippy.



The concrete doesn't shatter because the cable is holding it together in much the same way you can pick up a stack of poker chips sideways by squeezing them together.

Yeah, yeah, nobody is going to specify concrete for a fishpole even if it does work. I use this rather bizarre example for pedagogical reasons. The choice of materials is a major matter for designers. To make a good decision, the designer needs to know a lot about materials. A designer also needs to know about processes, and what they do to land and people. The choice may have a major effect on the environment, particularly if the materials are

obtained from the earth or other nonrenewable natural sources. Your choice may also have serious social effects if the materials are in effect stolen from a less fortunate nation with shamelessly exploited labor. Exposure to certain materials may harm the fabricating workers, too.

Are these matters the designer's responsibility? Yup. Otherwise, you'll have to lie to your kids about what you've done for a living. ☹

And we haven't even started designing yet! Next time: Designer-shortened fingers, truck-stop coffee, and other war stories from the frontier.

International Ecological Design Society Update

Since its inception on Earth Day 1995, the International Ecological Design Society has garnered a flood of interest. The IEDS brings together architects, product designers, planners, biologists, landscape architects, engineers, educators, and many others. It is a forum for those working to create prototypes of sustainable systems.

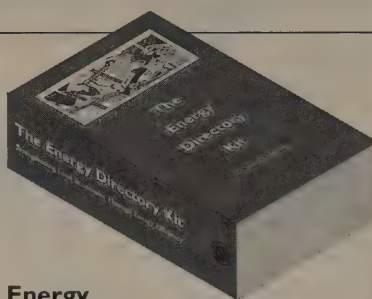
The IEDS is committed to innovative solutions, and hopes to bring together the brilliant work being done by sustainable designers around the world. The Society is currently setting up an electronic conference and Web page, and will be publishing a Journal of Ecological Design starting Spring 1996. Future projects include a conference series and curriculum development for a Masters of Ecological Design program.

For more information on membership, journal subscriptions, and other activities, please contact IEDS, PO Box 11645, Berkeley, CA 94712. Phone: 510/869-5015. Fax: 415/332-5808. Email: ecodesign@igc.apc.org —Stuart Cowan

The Energy Directory Kit

Unlike many groups, the Rocky Mountain Institute is really good at developing the strategies to bring about the changes that their research has shown to be desirable and possible. **The Energy Directory Kit** is a wonderful example. It has everything you need to gather and publicize the information on resource-efficient products and services in your area. The goal is to improve local energy efficiency, but the results include much more than that. The products and businesses you bring together will prosper. People will save money, and that money is likely to stay in the community. Air and water will be cleaner. All the good stuff.

The computer disk Kit includes pre-written letters, fill-in-the-blanks surveys, and most of the other easily procrastinated work. There's a copy of a success-

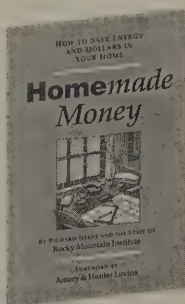


Energy Directory Kit

\$99 (\$106 postpaid). Includes directory on diskette, **Energy Directory**, **Homemade Money**, and camera-ready artwork. Specify DOS, Windows, or Macintosh word-processing format. A sharp high school class could take this and show the adults where it's at.

Homemade Money

We sang the praises of the first edition of this book, when it was called **Practical Home Energy Savings**. The new edition is much sharper and more comprehensive. As before, the experienced information is realistic — no huge-savings-in-one-year jive — and much more likely to make a difference than fifty ways to squash a can. This book is the best of its kind.



Homemade Money

(How to Save Energy and Dollars in Your Home)
Richard Heede. RMI/Brick House Publishing Company, 1995; 258 pp.
ISBN 1-883178-07-X
\$14.95 (\$18.45 postpaid)

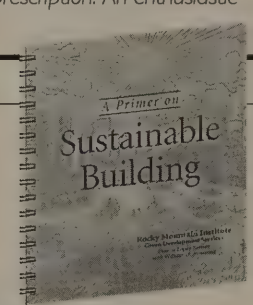
Home Energy Briefs

Seven pamphlets, four pages each, of energy-saving information on Lighting, Windows, Refrigerators & Freezers, Water Heaters, Cooking Appliances & Dishwashers, Washers, Dryers & Miscellaneous Appliances, Computers & Peripherals. They answer the beginner's questions.

A Primer on Sustainable Building

Observant travelers may notice that very few new houses and apartments take advantage of even the simplest solar heating, natural cooling, or climate-control planting. Many buildings are not sufficiently insulated. The reason for this appalling situation is usually ignorance — the architects, developers, and builders don't know how to do better, even when it would save them money. **Sustainable Building** is their basic education. It's easy to understand, filled with well-proved field experience, and irrefutably logical. Lots of anecdotes, resources, and impressive footnotes add to the book's usefulness and credibility — the sort of things you can quote to a board of supervisors. **Sustainable Building** is also a good review for architects already in the know.

- In a rush to deck the roof, the carpenter snaps a line along the roof truss tails, then cuts them off. On many houses that's how roof overhang length — an absolutely critical detail for both cooling and heating — gets determined. The proper overhang



A Primer on Sustainable Building

Dianna Lopez Barnett & William D. Browning. 1995; 135 pp.
ISBN 1-881071-05-7. \$16.95 (\$20.45 postpaid)

(which controls window shading) is a function of climate, latitude, building orientation, and a host of other factors. It should always be calculated, not guessed.

- The larger a building, the larger its environmental impact. Bigger buildings require more land, more lumber, more energy. Since architects and home builders typically make more money on larger homes, they have no incentive to encourage their clients and customers to build smaller. But does your client with two small children really need 4000 square feet? Six bedrooms? Five bathrooms? Have they considered their energy bills? Property taxes?

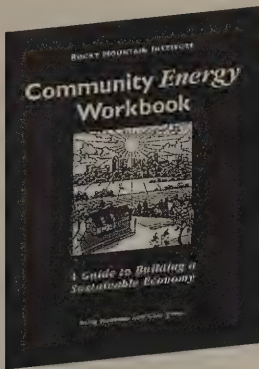
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team could implement significant changes that would benefit everyone. I keep thinking of getting kids involved. Could this be a nonpolitical community action movement getting under way?

Since the establishment of energy management programs in the early 1980's, residents, businesses, and agencies of San Jose, California have cut more than \$5.5 million from annual energy bills and saved enough energy each year to power 7,600 homes. San Jose predicts its sustainable energy programs will produce a county-wide \$33 million increase in wages and salaries, and a net employment gain of 1,753 job years over a ten-year period.



Community Energy Workbook

(A Guide to Building a Sustainable Economy)
Alice Hubbard and Clay Fong.
1995; 264 pp. ISBN 1-881071-04-9
\$16.95 (\$20.45 postpaid)

Deep Design

Manufacturers regard ecology as a mysterious, profit-cutting obstacle. Ecologists regard commerce as a villainous destroyer of ecosystems. Both sides tend to contentious dispute instead of cooperatively seeking solutions that can further mutual goals.

David Wann shows how an understanding of deep design can bring a good, sustainable standard of living to all people, without incurring profit loss or environmentally degrading compromises. His message goes beyond the easily said "we must" to "we not only can, we already have" and "here's how." The calm presentation and many examples of successful deep design (not just in architecture and planning) make this book credible to decisionmakers who need to know these things. A useful college course could be based on it. —JB

According to Catherine Zoi of the EPA's Office of Air and Radiation, it is estimated that "by the year 2000, EPA Energy Star computers and other campaigns to promote energy-efficient computer equipment will lead to savings of 25 billion kwh of electricity annually, reduced from a current estimated consumption of 70 billion kwh per year. These savings will prevent carbon dioxide emissions of 20 million tons, the equivalent to the carbon dioxide emissions of 5 million automobiles. . . ."

Why should the computer industry support Energy Star so strongly? First, significant energy reduction can be achieved with a small investment. Second, it encourages a shift in attitude away from command and control

Deep Design

Pathways to a Livable Future

David Wann

Foreword by Paul Hawken

Deep Design

(Pathways to a Livable Future)
David Wann. January, 1996;
230 pp. ISBN 1-55963-420-0
\$24.95 (\$29.20 postpaid). Island Press,
Box 7, Covelo, CA 95428; 800/828-1302

legislation as the only way to reduce pollution effectively.

One of the dubious bargains of our time is that we spend billions of dollars for services that used to be provided free by nature.

Humanity benefits from a value-retained rather than a value-added approach. A value-retained approach allows direct access to the services natural systems provide. To give a practical example, if we begin to compost grass clippings, sewage, and food scraps right in our neighborhoods, we won't have to pay to ship them across the city or region. We will avoid many of the costs of trucks, pipes, waste pits, and treatment plants, and we'll end up with an excellent soil builder as well. And if wetlands are retained at the edges of our cities we won't need expensive engineered substitutes for the extraordinary services they provide: natural water treatment, flood control, habitat natural beauty, and ground water recharge.

RHYMES WITH ORANGE

mutual of
OMAHA
presents:
THE
LIFE CYCLE
&
HABITS
of a
PENCIL.
HILARY B. PRICE

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ENVIRONMENT

under the refrigerator

inside the car defroster

Nocturnal creatures by nature, pencils like dry, dark environments.

NOT FINDING THIS EDUCATIONAL? JUST WAIT 'TIL THEY CUT FUNDING FOR PUBLIC TV.

COMING OF AGE

Each pencil must endure a grueling solo journey from the desk drawer to the space behind the drawer, making it impossible to close.

REPRODUCTION

hubba hubba

Pencils are loners by nature, except when people are moving. This causes a mating frenzy, and the pencil population multiplies.

Hilary B. Price and her vast pencil collection reside in San Francisco.





A New Bucky Map

Buckminster Fuller's Dymaxion-projection Air-Ocean Map has been updated with terrific satellite photography of how we really look from out (not up) there. No clouds sully the full-color view. This is the only map projection that lets you look at Earth's surface all at once without severe distortions. In some ways, it is better than a globe whereon you can only see about one-quarter of the surface at a time. Edifying and impressive. —J. Baldwin

Our Spaceship Earth

(Fuller Projection World Map)
\$16 (\$20.50 postpaid). Buckminster Fuller Institute, 2040 Alameda Padre Serra, Suite 224, Santa Barbara, CA 93103; 805/962-0022

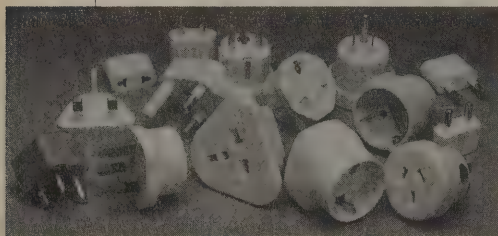
Plugs from Magellan's

This excellent store offers what can literally be called a world-class selection of plugs, adapters, voltage converters, and surge suppressors needed by computer-toting travelers to any country. They also stock modern adapters (and sly installation

kits) that will work on most foreign telephones. When a German tourist I met in L.A. needed a plug to fit his computer to US plugs and current, they had that, too. This is the sort of service that makes Magellan's our favorite, despite the whiff of cruise-ship foo-foo. (After all, some folks NEED a dual-voltage electric wrinkle-remover.) —JB

Plugs, Adaptors & Converters

Catalog free. Magellan's, Box 5485, Santa Barbara, CA 93150-5485; 800/962-4943, fax 805/568-5406



Fasten the last pentagon into place to finish your igloo.

Make it Work! Building

Kids' project books are usually sappy exercises in rule-following, rather like three-dimensional coloring books or click-together kits. This one has (mostly) interesting projects, attended by rudimentary instructions. While the absence of detailed directions may dismay adult supervisors and juvenile builders used to thought-free obedience, it gives room for original thinking, and a chance to do things better and smarter than the author. A few of the get-it-steps are a bit too much of a challenge (e.g. "You will need a long narrow water tank"), but those items can be regarded either as an invitation to a treasure hunt or as an opportunity for clever substitution. Let the kids figure it out — it's a good way to learn without humiliation. —JB



Building

(Make It Work! series)
Andrew Haslam & David Glover.
Two-Can Publishing Ltd., 1994;
48 pp. ISBN 1-56847-259-5
\$15.95 postpaid. Thomson Learning,
PO Box 71515, Chicago, IL 60694-1515;
800/880-4253

The Mathematics Calendar 1996

One for kids and one for everyone else, these calendars offer daily puzzles with the date as the answer. Breakfast discussion thereof may lead to interest in, and a clearer understanding of, math. —JB

The Mathematics Calendar 1996

The Children's Mathematics Calendar 1996

both by Theoni Pappas.
\$13.90 postpaid each,
\$24.85 postpaid for both.
Wide World Publishing/
Tetra, PO Box 476,
San Carlos, CA 94070;
415/593-2839

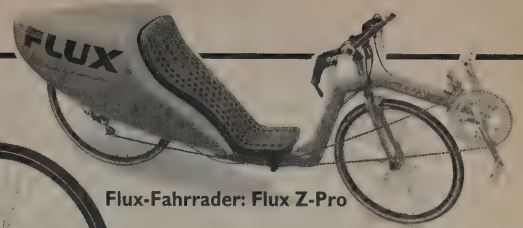
S	M	T	W	T	F	S
4 From a silver bag of 5 red, 4 gold and 6 green marbles, the probability of reaching in and getting a gold and then reaching in again and getting another gold, and finally reaching a 3rd time and getting yet another gold = ?/455	5 Which does not belong? $\sqrt{5}$, 5, 5π , $\sqrt{6}$, 4e, $3\sqrt{2}$	6 At 1:15pm this amoeba was placed in a dish with a special solution. The amoeba divides into 2 amoebas every 15 minutes. At 6:45pm the dish was full of amoebas. At what time was the dish a quarter filled?	7 Chez Pain has an early bird special of \$13 for dinner before 6pm. After open their dinners are \$17. On Monday, their dinners brought in \$737. What is the smallest number of early bird dinners they could have sold?	8 A sphere circumscribes a cube. Find the cube's volume if the sphere's surface area is 12 π square units.	9 $a_n = 1 + (-2)^n \cos n\pi$ $a_3 = ?$ n is a natural number:	10 The area of this Koch snowflake fractal curve is $40\sqrt{3}$. What was the length of the side of the original equilateral triangle used to generate the curve?

Encycloepedia 95/96 • Bike Culture Quarterly

When you hear somebody say "Come see my new bike," I bet the picture in your mind isn't one of these imaginative machines. The **Encycloepedia** is a full-color, big-format, annotated celebration of unusual bicycles from small manufacturers — proof that there are a lot of people seeking to build the ultimate human-powered vehicle. For "my-Huffy-will-do-just-fine" types, there is still much to learn from the manner in which these designer-builders are carrying out their explorations. **Bike Culture** is the (British) quarterly magazine behind the **Encycloepedia**. —JB



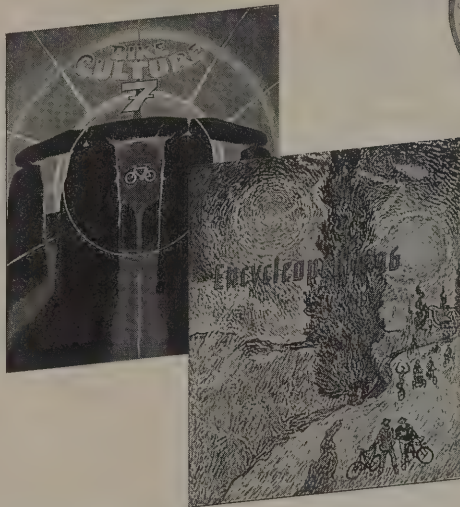
Jesper Sølling
Cykelproduction: Pedersen



Flux-Fahrrader: Flux Z-Pro



Cresswell Engineering: U+2



Bike Culture Quarterly Encycloepedia 96

Jim McGurn, Editor.
Encycloepedia 96: \$22 postpaid (includes 40 min. video); **BCQ:** Single copy \$10, subscriptions \$29.50/year (4 issues)
Encycloepedia, video & 1 year subscription \$45.
Open Road USA, PO Box 291010, Los Angeles, CA 90029

Inchmate+

The Inchmate was one of the first fractional calculators available, and has always been unusually easy to use. The Plus model features the expected six functions and a well-proven ability to deal with fractions down to sixteenths-of-an-inch. What's new is a right-triangle solver that greatly eases the figuring of such mistake-prone items as stairs and roof parts. Likes: crap-resistant keyboard and big, easy-to-see numbers. Dislikes: tiny buttons are best poked with a pencil eraser unless you have tree-frog fingers. —JB

TriFrame Tandem



Your friendly BMW dealer offers a folding tandem bike that fits in the trunk, away from weather and thief. Most roof racks will not accept the regular eight-foot two-seaters; those that do so give riders their biggest workout trying to load and unload the thing. Tandems are too long for bumper racks, too. The BMW bike is respectable; little compromised by foldability. It fills a need whether you have a Beemer or a 1966 VW bug: it's the one tandem you can take with you. Buzz out to the countryside in your burgundy 325i, and then — eyes flashing, hair flying, golden muscles aglow — ride away on a matching bicycle built for two. The thought is almost too idyllic to bear.

BMW also catalogs a folding mountain bike and a cross-trainer, but I consider such machines to be so personal and so easily carried on a rack that they're better chosen and fitted at a serious bike shop. —JB

BMW Tandem Bicycle
Information from your local BMW dealer.

InchMate+

Digitool Corp., \$49.95 (\$55.95 postpaid).
Tool Crib, PO Box 14040, Grand Fork, ND
58208-4040; 800/358-3096



Negotiating the Future by Design

BY
DAVID WANN

© Bob Simmons. Art: Sue Simmons.

THE BIOSPHERE NEEDS either smarter *Homo sapiens* or dumber ones, because this in-between state just isn't working.

Like teenagers slam-dancing in a formal ballroom, we're alarmingly out of step. In my opinion, nature-based design is the best tool we have to get back on track. I want to share a few of my attempts at learning what the term means.

Years ago, as the snow melted next to the little well-house that sheltered our water supply, I started planting peas in the cold spring soil. Half a foot behind the receding snow, my garden spade steadily transformed a patch of aspen-climax meadow into a double-dug, high-elevation vegetable garden. By the time that first gardening season was over, I'd had my first in-depth experience with a complete ecological system. I knew at gut level that there were guiding principles for interacting with nature — it wasn't just a free-for-all. You had to let nature do what it does best by skillfully staying out of its way, especially at key times and places. You had to learn to wait, the way the rest of nature does: like a wildcat waits for prey or a parched prairie waits for rain. You had to anticipate, envision, and carefully incorporate feedback at every step. You had to balance overall goals — not just maximize one goal — and you had to design for diversity, because there's no such thing as "jackpot" synergy in a monoculture.


David Wann is a writer, teacher, and videomaker. He works part-time at the EPA on pollution prevention, and he is an adjunct professor in Denver University's graduate environmental program. His latest book is reviewed on p. 111.

Wann's aspiration is to help tell the right kind of stories: "Like human societies throughout history, our culture is informed by ethical themes that we learn in stories. We need to do some fine-tuning in the performing arts — the media of storytelling. The message needs to be reemphasized that many things that have value cannot be bought and sold." —James Donnelly

Another pivotal experience was the mini-revelation about the biosphere I had as an undergraduate in the early seventies. Dawn was taking shape over a rolling Indiana pasture, and mist was rising from the fields as cows chomped on lush, green grass. Like a benign stroke of lightning, I suddenly "got it." Amazed, I commented to the dog standing next to me, "Wow, do you see it? That's how it works — it's all hooked together, the soil and the cow and the grass and the nutrients and the water. It's got its own infallible logic." This may sound like a trivial event, but I firmly believe that if we could transport busloads of elected officials and CEOs into the wilderness or even to that distant Indiana landscape on just the right morning, ecological design would become an ethical and technical priority by the day after tomorrow. The truth is, we can't afford to wait much longer than that. We have to change our rules and operating procedures very quickly to favor nature-based design, or our support systems and immune systems will continue to shut down.

The problem is that from the vantage point of those under the Big Top of "normalcy," life seems quite acceptable — why mess with success? We still haven't reached consensus on whether we have a good thing going, or a good thing going bad. It's part of our national identity to be optimistic, but let's get rid of the naiveté. We need to clearly perceive the chasms that lie under our shopping malls and legislatures or we won't make changes quickly enough to avoid being swallowed up by a chaotic future.

We have to make a broad enough conceptual leap to grasp that our Western way of living is totally dysfunctional, and based on obsolete assumptions. We have to perceive that the relationships between molecules and morals, energy and ethics are especially critical, because at the scale of cancer-causing bits of matter, or photons that deliver electricity to pump water, what we ought to do is often synonymous with what we must do technologically if we want to negotiate a livable future.

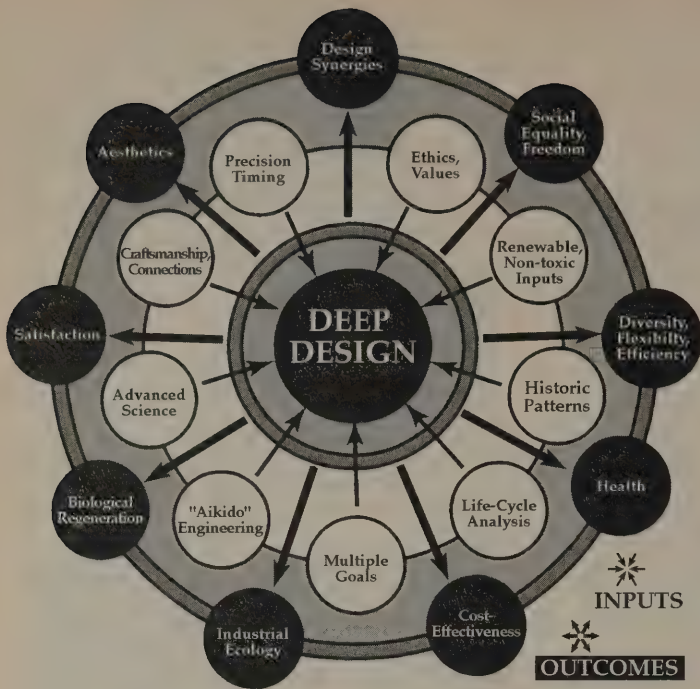


Instead of asking where environmental impacts came from, the EPA focused on where they ended up. We thought it would be enough if the supply side was allowed to do things less poorly, and we based our first, shallowest round of environmental regulations on least poorness.

I worked at the EPA for a decade, producing articles, TV programs, and books on the general theme of ecological design. I referred to it as "biologic," "aikido engineering," and "deep design" — by which I meant: Let's figure out precisely how nature works, and add new knowledge and wisdom to the way we do things. If our current ways of making paper or shaping communities are at odds with nature, let's invent new ways. Let's even invent new ways of being human, substituting cultural, biological, and spiritual wealth for the clumsy obsession with stuff that's ripping our world apart.

But we don't yet have a strong enough alliance to flip the culture over and change the shape of our world. The industrialized population has a menu mentality, and ecological design is not yet an entree on the menu. Unfortunately, regulations won't put it there — as currently written, environmental laws say "no" to industry at the same time that they accommodate it, essentially speaking a mutual language of outputs and value-added gadgets. Ecological design says "yes" to human commerce, but in a fresh new language with root words based on biology, psychology, and other facets of reality. Instead of the value-added syntax of economics, its vocabulary is about the value-*retained* criteria of regenerability, efficiency, appropriate scale, precision. Responsive to both nature and culture, ecological design asks: What behaviors and methods will leave the fewest footprints as well as providing the highest quality of life for *all* species? What do living systems need? How do resources flow on this planet, and how can we tap into those flows without subverting their function?

At the EPA, I saw America chasing shadows. Instead of asking where environmental impacts came from, we focused on where they ended up. We tried to quantify quality, letting the supply-side designers and marketers decide what kind of designs we needed. We thought it would be enough if the supply side was allowed to do things less poorly,



Deep design is the synthesis of nature and culture.

and we based our first, shallowest round of environmental regulations on least poorness.

We didn't see that the environmental crisis that stalks us is not simply about discharges and emissions. It cuts much deeper than that — it's about the whole structure that underlies the discharges: the way our world is set up. We keep adding one technology to another like extension cords to a single outlet — but we rarely stop to ask what we want those technologies to accomplish, other than speed, production, and profit.

In the long run, it won't solve the problem to clean up our messes, because impacts just keep gushing from a system that's programmed wrong. It's becoming increasingly clear that symptoms such as ozone layer destruction, urban congestion, and chemically induced cancer have origins within the human brain itself. To solve our deepening environmental crisis, we've got to first explore and enlighten that cavernous, echoing territory between our ears.



MY SON AND I stood under a "bearpole" in northern Canada a few years ago. The idea was to hoist your backpack fourteen feet in the air, out of reach of grizzly claws. A week later, when we camped on Vancouver Island, our strategy was completely different in scale. To prevent encroachment by mice,

we only had to suspend our packs a foot or so in the air. It occurred to me at the time that we were practicing ecological design, because our actions were based on the realities of nature. We didn't need to overcome nature, we just needed to understand it and design within its constraints. This approach applies in the design of anything from solar houses to biocompatible molecules. The key concept is alignment with existing natural mechanisms that have already achieved perpetual motion.

Recently, my daughter wondered out loud: How big would a ball of already-chewed gumwads be if wads, worldwide, were combined daily? I encouraged her to do a school project beginning with that image, and I think she became an ecological

designer in the process, because she began to think about the origins of gum, as well as the cumulative impacts of a myriad of small actions. She researched not only the impact of the gum itself, but its ingredients, the packaging it came in, and most importantly, the gum's life cycle implications. She discovered that to manufacture the current quota of Wrigley's spearmint gum, 30,000 football fields worth of mint were under cultivation. She asked: What quality of agriculture is practiced in those fields? How much transportation is required to bring the mint to the gum factories? How much energy is required to convert the ingredients to gum and transport it to stores? The overall quality of the gum involves far more than its taste, she concluded. Good gum doesn't kill ecosystems or draw down nonrenewable resources that are a potential bridge to the future. Despite rumors to the contrary, forever isn't over yet, and we'd better get busy designing our future, or we can count on being designed by it.

My daughter's project explored a new organizing principle of ecological or deep design: where does it come from, and where is it going? Analysis of how environmental damage happens reveals targets of opportunity for a new generation of designers. For example, if 40 percent of US energy is used in the construction and operation of buildings, and another 25 percent in infrastructure like roads, bridges, and transmission lines, it's clear that we need more efficient houses and better community design to reduce energy-related impacts. And if 30 percent

of US energy is expended in five primary manufacturing industries — aluminum, paper, steel, plastics, and container glass — we perceive that packaging is a real opportunity to reduce our impacts, because much of these materials goes into packaging (up to one-half of our paper, for example.)

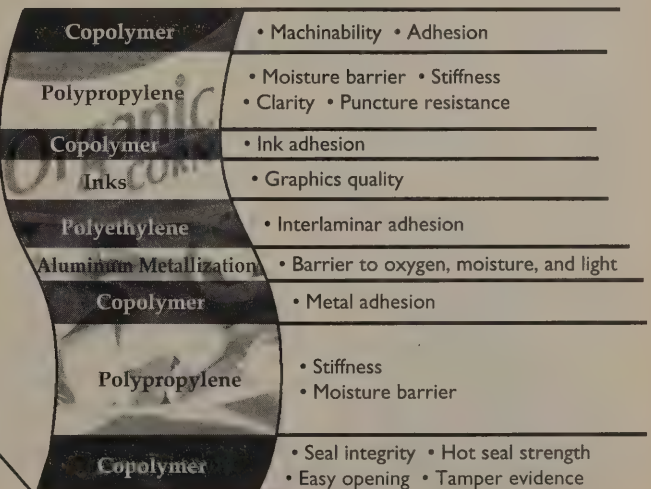
Certainly, we need to reduce packaging overall — for example, by eating food grown locally, buying consumer foods in bulk, and other practical measures. We also need to make packaging qualitatively better than it is now. Recently, when I was at the Center for Resource Management doing research on my book *Deep Design* (p. 111), we brainstormed alternative packaging for Ben & Jerry's Peace Pop. At that time, they were double-packaging: a high-tech bag within a cardboard box. They wanted ideas on how to get rid of that box. We took the design challenge to its limits, suggesting among other things that the package be a peanut-shell and/or a compost-seeking missile. That is, we proposed that the package announce, "I'm capable of rapid decomposition. Take me to a compost pile, and if there aren't any in your neighborhood, write this address for more information." We wondered if the packaging could actually include enzymes that would help keep a compost pile cooking. What if the packaging was made of compostable molecules that nature had already provided in the peanut shells, vanilla and cocoa bean hulls, and other by-products of the Pop's manufacture? We called a USDA laboratory to see if this idea was somewhere on the map

of feasibility, and they informed us that they were researching something similar — packaging made from cornstarch that could coat a Pop like a thin layer of chocolate. Only a low-tech paper wrapping would then be necessary, since the cornstarch layer would provide desired engineering properties like moisture-proofing. Ben & Jerry's decided to go with a laminated poly-ester package that was not compost-seeking, but did eliminate the need to log a lot of trees.

The less we demand from nature, the more it will provide. According to Daniel Quinn, author of *Ishmael*, humans were ecologically friendliest when we were "leavers" rather than "takers." I asked him recently if he agreed that our best course of action is to *design* a neo-leaver society. I shared with him my excitement about the work of some of our best ecological designers, in research enclaves across the country. Something like the monasteries that kept literature and science alive in the Dark Ages, institutes and laboratories are scattered across the country whose mission is to negotiate a workable contract for the design of the future. I've visited experimental plots at the Land Institute, whose researchers assume a new kind of agriculture: perennial polyculture rather than annual monoculture. I've stood under the whirling wind turbines at Altamont, California, where 7,000 machines power the equivalent of hundreds of thousands of homes. I've walked through Village Homes, a neighborhood-by-design in Davis, California, that proves itself out with a

We can't always buy fresh food from local sources to eliminate packaging altogether, but we can change the way packaging is made. Packages with composite layers are especially impressive from an engineering standpoint. But from a deep design perspective, they are questionable — they're difficult if not impossible to recycle and are made from nonrenewable resources.

Comprising nine different layers, the state-of-the-art snack food bag is only 0.002 inches thick. Which layers are designed for the environment? None. Yet because composite packaging requires less material and offers the advantage of preserving contents against spoilage, many companies who are genuinely trying to be "green" justify its use.



lower crime rate, lower energy and water bills, higher value per square foot, and the intangible way it feels. I've walked through some of John Todd's "living machines" that purify water the way nature does, and through the laboratories of people like John Frost, where alternative pathways of manufacturing chemicals are being explored. These are some of the endeavors discussed in *Deep Design*, a book whose writing enabled me to feel at least a little optimistic.

In video projects with two groups, Greening America and Mega-Cities, I was privileged to interview other change-makers, such as Paul MacCready, designer of the pedal-powered airplane Gossamer Condor, the solar-powered Sunrayer, the General Motors electric car, and a hamster-powered mini-airplane. What's the vehicle of the future? According to MacCready, it is the human mind. When we figure out where we want to go as a culture, our minds can design the right vehicle to get there. I interviewed owners of hydrogen-powered vehicles and electric vehicles, like actor Ed Begley, Jr., whose bike, electric car, and natural-gas-powered van have kept him away from gasoline pumps for the past five years. I've talked with social innovators as well — people who inspire gang leaders to channel their energies into art. Once they accept the "coolness" of dancing and theater, the gang leaders begin to redirect their charisma onto the stage.

My conversations with these people and dozens of others have taught me that humans have the intelligence, intuition, and instincts to sustain the biosphere as well as human sanity while we get serious about population control and equity. But do we have the will, and the guts? We're programmed to be pain-avoiders, and it seems painful to us to make major changes, especially since some of the changes seems to be going "backwards," a violation of our progress dogma. Yet as J. Baldwin, John Todd,

David Orr, and others have pointed out, our most fruitful potentials are hybrids of the past and future that integrate proven winners of evolution's time trials with high-tech adjustments that spring from our own evolutionary brains.

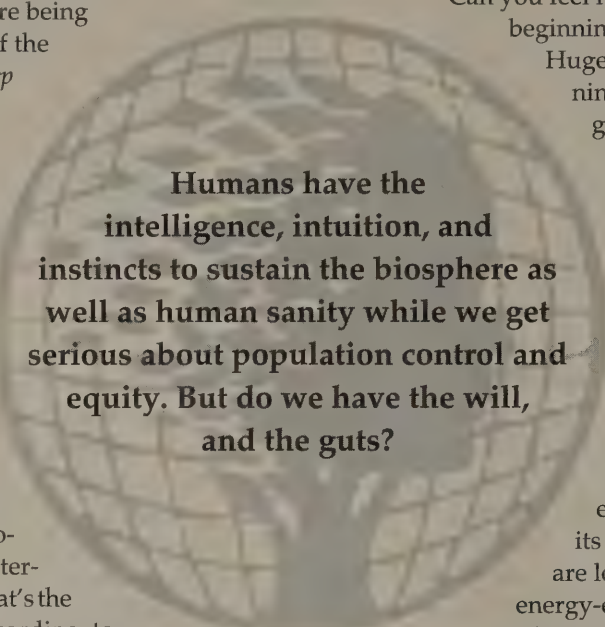
Can you feel it? The changes are already beginning to happen in a big way.

Huge corporations are beginning to bend their shape to go with the momentum, just as Paul Hawken advocates in *The Ecology of Commerce*. (MWEC, p. 68). America's Big Three car companies are finally experimenting with cars that will operate at three times their current efficiency. Energy and water utilities are encouraging efficiency and justifying its cost-effectiveness. Banks are lopping interest rates for energy-efficiency mortgages.

Retailers are supplying "natural" products, and employees are opting for early retirement and part-time work, to favor a slower, higher quality of life. Planners and architects are building green homes and communities.

One such community is Harmony Village, a consortium of twenty-seven families, including mine. Instead of choosing from the conventional menu of home and neighborhood options, we're designing our own community. We've just gotten final approval from the planning and zoning commission to go ahead with our high-density, high-open-space development.

These innovations and changes in course are indications that ecological design is creeping into the mainstream. Ecological design is radical, demanding huge changes, some of which will be quite pleasant. There's no doubt that adopting deep design as a new way of living will require some risk-taking and some flexibility, but one thing is certain: we'll never experience the summit unless we're energetic enough to make the climb. ☘



Humans have the intelligence, intuition, and instincts to sustain the biosphere as well as human sanity while we get serious about population control and equity. But do we have the will, and the guts?

Metapatterns

Why do suns, eggs, grapes, baseballs, and cathedral domes take a spherical form? What do rivers, blood vessels, nerve nets, and royal scepters have in common? How do we reduce time to spatial patterns in order to grasp it? This remarkable book explores certain common forms — spheres, tubes, sheets, centers, binaries, borders — which appear and reappear on different levels of reality. The author skillfully identifies the functional relationship each represents, and shows how they operate in many different situations, whether physical, biological, social, or mental.

Tyler Volk has created a new genre for thinking about ourselves, our world, and our creations and has done it with clarity, grace, and humor. In this book he has built an intricate rope bridge from the inquires of Pythagoras and Plato to the modern panoramas of science and art.

The author was at one time a student of Gregory Bateson's. He has degrees in architecture as well as energy and earth sciences and teaches earth systems science at New York University.

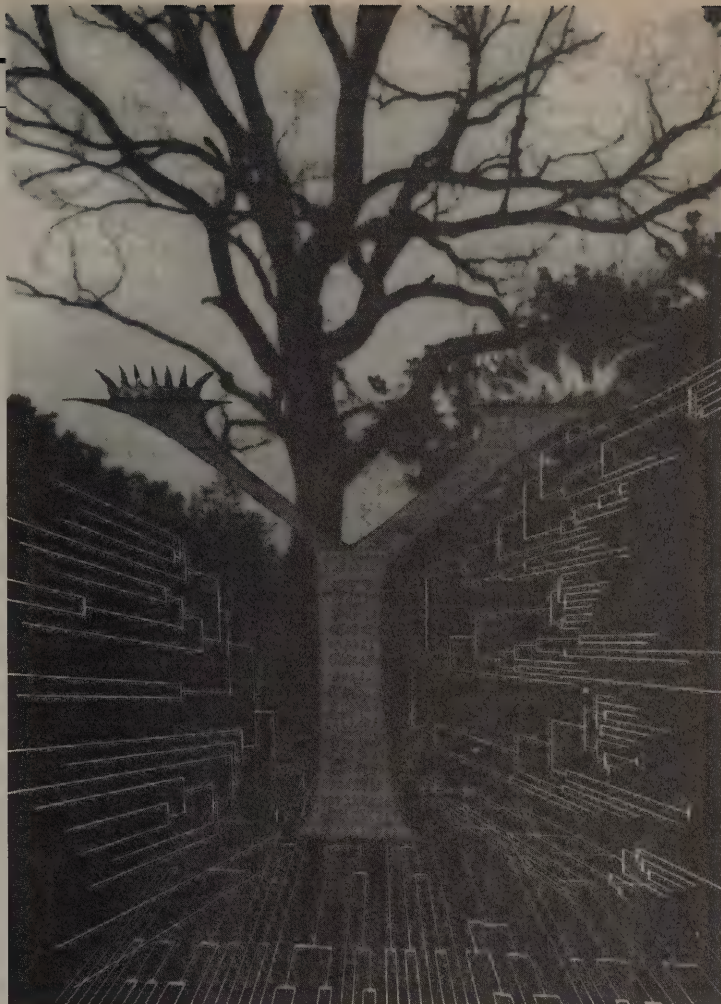
This book offers new perspectives more than final answers. It is a real mind-opener. —Sterling Bunnell

■ Metapatterns are not the canoe but the lake itself. Just as the feeder streams flow into this single body of water, so too the streams from many regions of reality pour into the great reservoir of metapatterns. Perhaps the metapatterns are attractors — functional universals for forms in space, processes in time, and concepts in mind.

■ The reach of structural tubes goes beyond biology — back into physics and forward into technology. A universal property or function of tubes is that they maintain distances. From tubular bonds between atoms to the beams of buildings, tubes offer escape from inward-turned sphericity. Together, the lines of tension and compression provide separations at particular distances to create forms in space.



Ice and surface temperature constitute a positive feedback in the complex system of causal loops we call climate. An arrow of perturbation in one affects the other in a manner that loops back to amplify the original perturbation. This glacier in Alaska is an awesome arrow in physical space, but it is also an arrow in time: the age of the ice increases the further from its alpine source.



Branches of trees spread into the possibilities of photosynthesis, those of evolutions into form and function. The three phylogenies, based on molecular similarities, are drawn from diverse groups: bacteria, insects, and metazoans. The forks in human life — traditionally symbolized by a Y embellished with icons — spread into choices.

● To communicate about patterns in time, we commonly down-dimension time into space. Time is frozen in the horizontal axis of a graph and its pattern is read in a wiggly line that bridges space (y) and time (x). Time is represented by a clock whose motion we can read against the background of numbers. Time is implied by a linear series of photographs of a horse galloping in fragmented moments crystallized from a continuum. Time gets mapped into space.

Such mapping transforms the mysterious substance of time into more familiar objects in space that we can see, hold, and share. Psychologists call this the spatialization of time.

Metapatterns

(Across Space, Time, and Mind)

Tyler Volk. 1995; 296 pp.

ISBN. 0-231-06750-X

\$24.95 (\$27.95 postpaid). Columbia University Press, Order Dept., 136 S. Broadway, Irvington, NY 10533; 800/944-8648

Metapatterns

(Across Space, Time, and Mind)

TYLER VOLK



Designing Citizens

Excerpted from a short talk
with Carnegie-Mellon University's
Industrial Design Faculty

BY WENDY E. BRAWER

ONE

Don't check your citizenship at the studio door. Take part in the bettering of the country by involving your students in the examination of bigger problems and conditions plaguing our society. Are domestic disarmament and child abuse design problems? Industrial design skills are well suited to developing solutions to more challenging problems than those raised by most products. Help set the stage for deeply motivated citizen designers.

TWO

Most Americans are aware of their rights as citizens; a design school teaches us about our design rights, and how to safeguard things like our intellectual property rights. But what about our responsibilities as citizens and as citizen designers? Do we owe anything to our society beyond the pleasure and status an elegant widget can give? Is quality of life being sabotaged, corrupted, or improved by industrial design? Can designers take heart and become post-industrial? How can designers help create an America where stewardship and being an asset to the community are enjoyable and natural parts of our profession?

THREE

This nation of rugged individuals needs better tools for collaborating with others. Teach us to communicate with engineers and scientists, politicians and business people. Help us work fairly with people, regardless of stereotyped differences. Part of this is de-emphasizing ego and competitiveness in design education. Please teach us to respect heroic deeds above heroes. We need to look beyond Western culture and encourage a cross-disciplinary, cross-cultural approach.

FOUR

We can't guarantee a life of sufficiency and dignity to each human in America, let alone the rest of the world, until we understand the fundamentals of restoring and maintaining a sustainable society. One of the first steps toward that is to expand our definition of home,

and use that broadened definition when assigning class projects. We must think and talk about where and how we wish to live. What do housewares look like when we include our whole bioregion in our definition? Students must have a better understanding of the upstream and downstream effects of their work on our environment. We must rethink the role of natural systems and cycles in our designs, and understand how permanent even our most disposable products really are.

According to Paul Hawken, the average American adult can recognize approximately one thousand different logos and trademarks, but can name fewer than ten plant species. Designers have had a lot to do with this unbalanced view, the positioning that has made Americans



Sculpting with the Environment

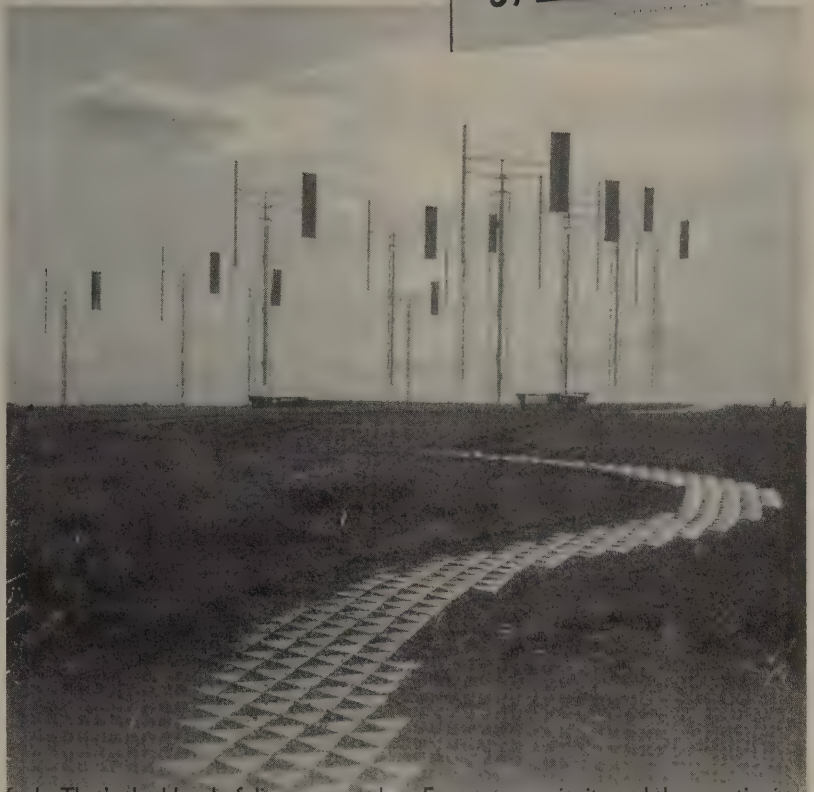
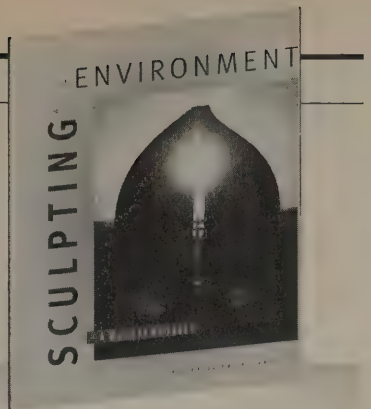
This elegant book may be thought of as the catalog for an enormous art show without a museum. Nature provides the venue. The thirty-five artists work in large, even enormous scale. One artist is reconfiguring a volcanic crater to intensify your experience of light and space. Another puts wind and stream currents to work playing music unique to the moment. A drinking fountain symbolically made from a habitat-destroying disc harrow nurtures its integral willow tree, which in turn cools the water. A public park gives habitat to endangered species. One scheme hooks entire watersheds together along the west coast of the US! All are concerned with integrating the viewer/experiencer with nature, changing perspectives, reestablishing and enhancing our connection to Earth. —J. Baldwin

Left: Lightning Raptor Roost by Lynne Hull. Red Desert, Wyoming, 1990.

Right: Wind-organ Towers by Douglas Hollis. Seattle, Washington, 1983.

Sculpting With the Environment

Baile Oakes, Editor. 1994.
251 pp. ISBN 0-442-01642-5
\$59.95 postpaid. Van Nostrand Reinhold,
Order Dept., 7625 Empire Drive,
Florence, KY 41042; 800/842-3636



view environmentalists as extremists and weirdos. I compare this position to where computer nerds were a short time ago. Now they are leading us all down the information highway, and today's job market demands that designers have well-developed computer skills. Likewise, without the ability to integrate environmental considerations into our projects, we will not become leaders, and we'll be much less employable in the near future.

FIVE

Don't fear the sun. I'm talking about renewable energy now, and the opportunity

this constant source of power affords designers. Don't continue to buy the illusions created by cheap fossil

fuels. That's the blood of dinosaurs, and it will drive us to extinction too. Investigate the scientific and political reality of oil and learn about the tremendous strides renewable technologies are taking. Don't make America dependent on old technologies, and stop waiting to put the emerging renewable dynamos to work. Many options are cost-effective now, and a tremendous range of other sustainable technologies are near term.

Design = Power. We are in a great position to design innovative infrastructures, applications, and systems.

SIX

Please teach us that learning never ends. Don't send us out into the world thinking that we are ever done being students. Everything is evolving too fast to permit us to rest.

Encourage curiosity and the questioning of authority, even yours. Get us to consider design a continual quest, and get us to decide what the quest is for. Designers need long-term goals for their lives' work.

If we start now, perhaps by the millennium we'll have developed the ability to plan and design in a more holistic, democratic way. Perhaps we'll be ready. ☺

Wendy E. Brawer is a post-industrial designer in New York City. Since 1990 her company, Modern World Design, has created services and products that promote ecological stewardship, such as the Times Square Deposit Banks and the Green Apple Map (which is currently being expanded into a global Green Map System). You can find Brawer on the Web at <http://www.interport.net/~webrawer/web.html>.

Gossip

We have started a series of monthly dinner/seminars for Point staff and board members. Tyler Volk, an earth systems scientist at New York University and author of *Metapatterns* (reviewed on p. 119 in this issue) led the first evening. People stayed late conversing, arguing, and having a good time. At a future seminar, Michael Murphy and George Leonard will talk about their recent book, *The Life We are Given* (WER 86:66). Susan Griffin will lead a discussion on society, the body and the experience of illness. And Ty Cashman plans to speak on "Jumpstarting a Wind and Solar Renewable-Energy Revolution." In last spring's WER (#85:50), he presented a cogent argument for the transition to a hydrogen-powered economy, starting now. As new Point Board president, Ty put aside much of his own work at the Solar Economy Institute throughout the past fall and worked tirelessly at fundraising on Point's behalf. In December he will present the keynote address of the fifteenth New Energy Industrial Symposium, held at the United Nations University in Tokyo. The address challenges Japan to lead a worldwide solar/hydrogen energy revolution. Representatives of 168 utility and fuel companies, as well as independent engineers and scientists — folks who can actually make a difference — will hear his speech.



Winslow Colwell

David Silvergate (left) of Sky Designs, the inventor of the Woosh (WER 86:107), came up from Santa Cruz to talk about the process of invention. He brought Wooshes in

several pleasing and ridiculous sizes, and his more recent sponge-nosed

SkyBlasters with integral rubber-band propulsion systems. Trained in optical physics and perseverance, he has more than one hundred ideas in the works. Watch this space.

Craig Childs, our canyonlands contact and regular contributor, camped out at the WER offices for a week to write reviews and to polish

reviews and articles from issues 84-87 of WER. It will be added at no extra cost to copies of MWEC shipped beginning in November, 1995. It is also available from our offices for \$5 (to cover postage and handling).

Pixel Farmers Kathleen O'Neill and Winslow Colwell, WER's



"If I'm gonna pay for the beer, I'm damn sure gonna drink some of it" — Dick Fugett, general purpose clerk, hovers close to the beverages at his well-attended wake. The beer in question is chilling in the coffin Dick made himself. Guests customized the box with Magic Markers.

his latest book. He proposed that we produce an issue on the Green River in Utah. Mmmm: how might we do that?

The Real Goods advertisement on the inside back cover of this issue (the next one, too) is there to fulfill a contractual agreement made over a year ago by the previous Point management. This one-shot (or two-shot) deal does *not* mean we have made a decision to resume display advertising in future issues.

We have completed a 1996 *Millennium Whole Earth Catalog* update. It includes all known changes and corrections to MWEC access information (except for prices). The update is sixteen WER-size pages, and includes some of the best

designproduction team, are designing J. Baldwin's *BuckyWorks* (Wiley & Sons, March 1996), an introduction to Buckminster Fuller's work and the practical application of his ideas today. JB worked with Fuller on and off for years. Many of the book's 208 photographs and drawings are from Fuller's personal archives and have not been published before. We'll all catch a glimpse of *BuckyWorks* in the spring issue. JB appeared on National Public Radio's *Talk of the Nation/Science Friday* last summer in commemoration of Fuller's one hundredth birthday. To obtain a tape of the show, call 202/414-3232 or email SCIFRI@npr.org. Be sure to specify that you want the second hour of the July 21 show.



Contributors' Guidelines

Consider yourself to be writing a letter to an intelligent, uninformed friend. Good WER material is often found in passionate personal statements or descriptions of the writer's activities. Good things can be done with obscure subjects.

Don't inflate a good short piece into a long tedious one. Don't send a variation on an old idea. Don't send an indictment of the status quo unless it concludes with a solid suggestion for fixing the problem.

If you send a query letter, please accompany it with a fairly close synopsis of the proposed article.

Put your name and particulars on the (sublimely legible, doublespaced) manuscript's first page. Word-processed documents are swell, especially when you send us a disk. Typewritten is okay.

Don't be crushed at rejection. We reject our own material, too.

We acknowledge receipt of unsolicited submissions (including reviews), noncommittally, by postcard. If we like your material we may hang on to it until hell freezes over, waiting for the right circumstances in which to print it. Sometimes the circumstances never arrive.

Reviews

In the perfect review, the topic is briefly described (not necessarily analyzed) and the reviewer gets out of the way. Tell readers why they should spend their money and time on the item. We don't bother with negative reviews.

The excerpts are important: they convey the soul of a book. If you're sending a review on disk, please type the excerpts, noting their page numbers. Or send photocopied pages with the excerpts marked thereon. Don't send us your own copy of a book.

We pay \$40 upon publication for original reviews. Payment for articles, photographs, and illustrations is negotiated case by case. Whole Earth buys all rights to reviews, and first-use rights to articles. We reserve the option to reprint; if we reuse an article, we'll pay you an additional amount. It is our policy to allow small-quantity reprints for nonprofit educational classroom or community use at no charge. If another publication asks to reprint your piece, we will refer them to you.

Send submissions to Whole Earth Review, 27 Gate Five Road, Sausalito, CA 94965. Fax 415/332-3110. Email wer@well.com.



Kathleen O'Neill

A freestyle Fugett memorial was organized by Dick's friend and neighbor Greg Duncan: good therapy for the living. This corner of the gathering looked like Whole Earth Alumni Week. Left to right: Andrea Sharp, J. Baldwin, Joe Kane, Lorrie Gallagher, Susan Erkel Ryan, Don Ryan.

A couple of people dear to WER have crossed the river:

Dick Fugett, Whole Earth general purpose clerk (1977-1989) and Peace Corps/101st Airborne/Venceremos Brigade veteran, died of cancer on September 2, with friends and daughter Kerry nearby.

Back in June, fifty of Dick's friends from all over the country held a wake. They spent a weekend embarrassing him with laudatory Fugett stories and making sure his casket stayed full of ice and beer. Directly thereafter, Dick and Kerry squeezed in a brief trip to Ireland.

Helen Nearing. Amazing!



Lynn Karlin

There they found their way to the Co. Galway bothy that his great-great-grandmother had fled during the Famine.

In the last paragraph of the last issue of the Fugett newsletter, *Narrow Acres News & Battle Cry of Freedom*, Dick wrote:

what little fear i have of Death is like the fear that preceded my 1st acid trip. Crossing Over/Death will be even more pleasant. but leaving kerry — ahh, that's when i cry . . .

Back-to-the-lander and author Helen Nearing died at ninety-one last September when her car hit a

tree. We ran an interview with Helen in WER 84 ("The View From Ninety," p. 54). She had just completed *Light on Aging and Dying* (Tilbury House, 1995). Winslow Colwell visited her home in Maine not long before her death; he was the twenty-first visitor that day. A sign on the front door read: "The mornings are our own. Visitors welcome 3-5 pm. Help us live the Good Life."

—Ruth Kissane

THANK YOU.

Unlike most magazines, *Whole Earth Review* is almost entirely reader-supported. We depend on the extraordinary encouragement of our Supporting Subscribers. Thank you!

As a way of acknowledging your crucial importance, we print your illustrious name and that of your scenic hometown in the magazine (unless you prefer to remain anonymous). *Whole Earth Review* is published by Point Foundation, a 501(c)3 nonprofit corporation. Therefore most of your contribution is tax-deductible (check with your tax expert).

Would you consider joining the folks that make this magazine unique? You can support us at any of several levels:

- **Perpetual:** \$10,000/lifetime. Perpetuals get a set of back issues (as complete as we have), two copies of every existing Point book or product, and receive their *WER* in an envelope, air mail, forever (a Perpetual subscription can be willed to descendants, or passed on to others) — or as long as we are around. And we will gratefully print your name here, also forever.
- **Angelic:** \$5,000/lifetime. Angelic subscribers get two copies of every Point book or product, and get their *WER* in an envelope, air mail, for the rest of their life or ours, whichever comes first. And we publish your distinguished moniker forever.
- **Maniacal:** \$1000/lifetime. Maniacs get their *WER* in a sturdy, attractive envelope, air mail, as long as they (or we) live. And your name shines on these pages forevermore.
- **Munificent:** \$250/year. Munificents get their *WER* in an envelope, air mail, for a year, and two copies of whatever books we publish that year. Your generosity is trumpeted here for a year.
- **Sustaining:** \$100/year. Sustainers get their *WER* in an envelope, air mail, for a year. And their names appear on these pages for that year.
- **Retaining:** \$50/year. Retainers get their *WER* in an envelope, air mail, for a year. We print their names in one issue as an example to the potentially generous.
- **You may, of course, support us anonymously at any level if you prefer that we not enshrine your wonderful name.**

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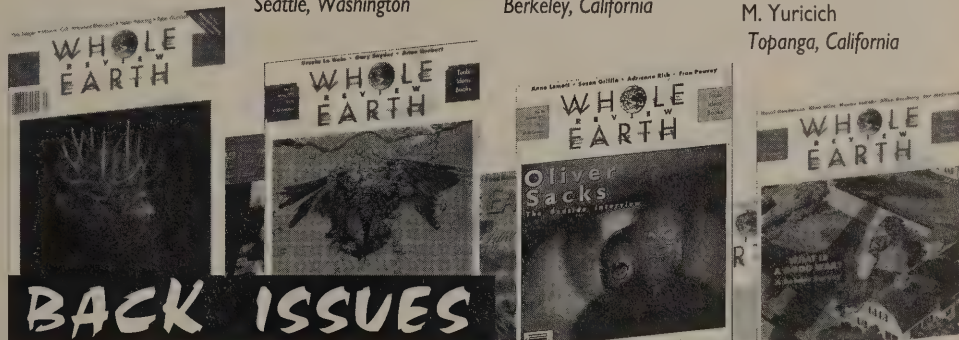
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Our back issues are stuffed with pure *Whole Earth Review* material (no other magazine can say that of its back issues!) — no cereal products, no ads (hardly), not one word about Princess Di or OJ Simpson. Like some strange cheese, WER can be at its most . . . piquant . . . after long and careful aging in a climatically correct warehouse. Try a fistful of back issues today and experience flavor-packed intellectual satisfaction of a kind rarely found in this tawdry world.

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Bound photocopies of these Extinct issues are \$35:

1, 3–9, 51, 52, 55, 57, 60, 61, 64, 68, 69, 85.

Issue 27 was *The Next Whole Earth Catalog*. It is not available as a back issue.

Send an SASE to Back Issues, 27 Gate Five Road, Sausalito, CA 94965 for a brief description of some of the magazines' contents.

TO ORDER: Call 800/938-6657 (from outside the US, call 415/332-1716) or fax 415/332-3110. \$20 minimum for credit card orders.

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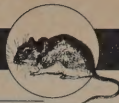
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Umpdakes and Corruptions

Issue 87:

The Defense Monitor (p. 29 and 84-72) is now accessible through email (cdi@igc.apc.org) and the World Wide Web (via Internet: www.cdi.org).

Break the Mirror, by Nanao Sakaki (p. 70) is back in print. Contact Blackberry Books (617 East Neck Road, Nobleboro, Maine 04555; 207/729-5083).

We neglected to credit **Boleyn Baylor** for transcribing the Nanao Sakaki interview.

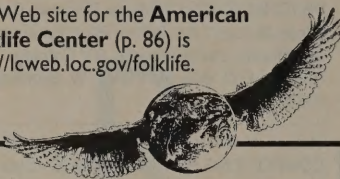
4000 The Fifth Milenium (p. 18) is \$14.95, not \$17.95.

Our review of **Rebuilding Community in America** (p. 42) failed to credit Kathleen Smith as its co-author. Sorry!

"Ecological Design: Nature's Geometry" (p. 8) was excerpted from **Ecological Design**, by Sim Van Der Ryn and Stuart Cowan. See WER 85:49 for review.

Four books reviewed in #87 are obtainable from a new address. **Fractals** (p. 19), **America Calling** (p. 42), **My Tibet** (p. 79), and **Slide Mountain** (p. 102) may be ordered from California/Princeton Fulfillment Services, 1445 Lower Ferry Road, Ewing, NJ 08618; 800/777-4726.

The Web site for the **American Folklife Center** (p. 86) is <http://lcweb.loc.gov/folklife>.



Issue 86:

Lake City Lathe Company, manufacturer of the treadle flywheel wood lathe reviewed on p. 59, has a new area code: 970/944-2245. The lathe is now available as a kit (plans and hardware; you supply the wood) for \$553.60 postpaid. PO Box 444, Lake City, CO 81235.

The Millennium Whole Earth Catalog:

P. 196: Secret Garden, publisher of **The Clitoral Kiss**, has a new address: PO Box 64759, Tucson, AZ 85728; 520/743-8100.

P. 308 (also WER 84:61): **The Caretaker Gazette** is now accessible via email: garydunn@pullman.com. They also have a new address: 2380 NE Ellis Way, Suite C-16, Pullman, WA 99163; 509/332-0806.

P. 367: You may find the online discussion group **PSYCHE-D** at listserv@iris.rfmh.org. For the group's free journal, *Psyche*: <http://psyche.cs.monash.edu.au/>.

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M. Total (Sum of 15b, 15c, 15d, 15e, 15f, 15g, 15h, 15i, 15j, 15k, 15l, 15m, 15n, 15o, 15p, 15q, 15r, 15s, 15t, 15u, 15v, 15w, 15x, 15y, 15z)	48,176
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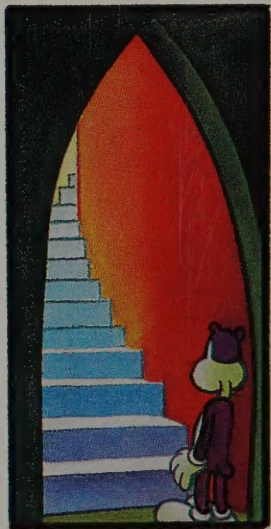
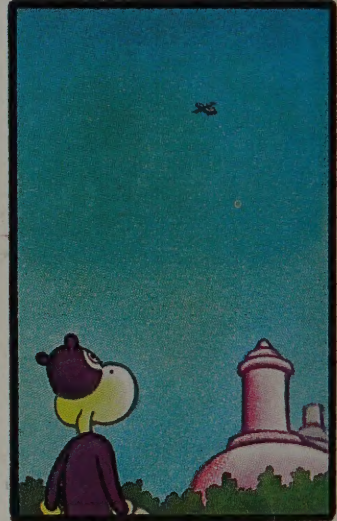
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